

**High-involvement Work Processes, Trust, and Employee
Engagement: The Mediating Role of Perceptions of
Organisational Justice and Politics**

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ABSTRACT

A still growing body of empirical research has demonstrated that high-involvement work processes (HIWPs) have positive relationships with various measures of organisational effectiveness. However, critical scholars maintain the following: First, the “how” question of the relationships between HIWPs and outcomes has been rarely investigated, thus leaving a gap in our understanding of the underlying mechanisms through which HRM affects outcomes. Second, the mutual gains model implies that the goal of HRM is to produce beneficial effects for both employees and their organisations. However, research to date has largely focussed on ways to enhance organisational performance, while employee concerns have been a secondary consideration. Third, most studies examining the relationships between HIWPs and outcomes have been cross-sectional. While, methodological researchers argue that since organisational processes are not static, rather develop, change, and evolve overtime, a longitudinal design is better than cross-sectional designs.

To address these concerns, which frequently appear in the HRM literature, the primary aim of this study was to explore the mediating role of employees’ perceptions (the so called “black box”) of organisational justice and organisational politics in the relationship between HIWPs and employee outcomes (employee engagement and trust in employer). A secondary aim of this study was to test the proposed model using a longitudinal design.

Using a longitudinal design with two data collection periods separated by approximately six months, data were gathered through self-completion questionnaires from non-managerial employees working in the domestic private banks in Pakistan. At Time One, 1554 employees from 233 branches of 14 domestic private banks participated in the survey. Of these employees, 970 participated at

Time Two. Data were analysed using structural equation modelling through SPSS AMOS v. 24.

The cross-sectional findings ($n = 1554$) indicated that HIWPs are positively associated with perceptions of organisational justice, employee engagement, trust in employer, and negatively associated with perceptions of organisational politics. Procedural justice and organisational politics partially mediated the relationship between HIWPs and employee engagement; while, informational justice partially mediated the relationship between HIWPs and trust in employer. However, no support was found for the mediating role of other justice dimensions in the relationship between HIWPs and employee outcomes.

The longitudinal structural model ($n = 970$) was then tested using the change scores method ($\Delta = T2 - T1$). The overall findings from the longitudinal structural model validated the cross-sectional findings. However, a few changes in the mediated effects took place suggesting that, besides procedural justice and organisational politics, distributive justice may also be a potential mediator in the relationship between HIWPs and employee engagement and trust in employer. Implications and limitations of these findings are discussed.

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TABLE OF CONTENTS

ABSTRACT	iv
ACKNOWLEDGEMENTS	vi
LIST OF TABLES	x
LIST OF FIGURES	xiii
CHAPTER 1: INTRODUCTION	1
1.2 Empirical Evidence on the Effectiveness of HIWPs.....	2
1.3 Research Aims and Questions	6
1.4 The Basic Premise of this Study	6
CHAPTER 2: THE BACKGROUND LITERATURE AND HYPOTHESES ..	10
2.1 HIWPs, Employee Engagement, and Trust in Employer	10
2.1.2 HIWPs and Employee Engagement	14
2.1.3 HIWPs and Trust in Employer	17
2.2 HIWPs and Organisational Justice	20
2.2.1 Organisational Justice	20
2.2.2 HIWPs and Distributive Justice	21
2.2.3 HIWPs and Procedural Justice.....	24
2.2.4 HIWPs and Interactional Justice (interpersonal and informational)	28
2.3 HIWPs and Organisational Politics.....	31
2.4 Organisational Justice, Employee Engagement, and Trust in Employer	35
2.4.1 Organisational Justice and Employee Engagement	35
2.4.2 Organisational Justice and Trust in Employer	39
2.5 Organisational Politics, Employee Engagement, and Trust in Employer	42
2.5.1 Organisational Politics	42
2.5.2 Organisational Politics and Employee Engagement	44
2.5.3 Organisational Politics and Trust in Employer	46
2.6 The Indirect (mediated) Relationships	49
CHAPTER 3: METHOD	53
3.1 Research Design.....	53
3.2 The Population, Sampling Method, and Participants.....	54
3.2.1 The Population of this Study	54
3.2.2 Sampling Method.....	56
3.2.3 Participants	58
3.3 Procedure	62
3.4 Analytical Procedure	64

3.5	Model Evaluation Criteria	65
3.5.1	Absolute Fit Indices	66
3.5.1.1	Chi Square Statistic	66
3.5.1.2	Root Mean Square Error of Approximation	67
3.5.1.3	Standardised Root Mean Square Residual	68
3.5.2	Incremental/Comparative Fit Indices	69
3.5.2.1	Comparative Fit Index.....	69
3.5.2.2	Incremental Fit Index	70
3.5.2.3	Tucker-Lewis Fit Index.....	70
3.5.3	Parsimony Fit Indices.....	71
3.5.3.1	Parsimony Comparative Fit Index	71
3.6	Variables' Definitions, Measures, and CFAs	73
3.6.1	The Independent Variable – HIWPs.	73
3.6.2	The Mediating Variables – Organisational Justice and Politics	85
3.6.2.1	Organisational Justice	85
3.6.2.2	Organisational Politics	92
3.6.3	The Dependent Variables	101
3.6.3.1	Employee Engagement.....	101
3.6.3.2	Trust in Employer	109
3.7	The Final Measurement Model.....	112
3.8	Common Method Bias.....	121
3.9	Assessment of Normality.....	124
3.10	Testing for Homogeneity of Variance.....	126
3.11	Assessment of Multicollinearity	127
	CHAPTER 4: CROSS-SECTIONAL DATA ANALYSIS	130
4.1	Structural Models	130
4.2	Hypotheses Testing	135
4.3	Mediation Analysis Strategy.....	137
4.4	Testing the Direct Effect Hypotheses (1 to 10)	142
4.5	Testing the Indirect Effect through Individual Mediator (Hypo. 11 to 20)..	149
	CHAPTER 5: LONGITUDINAL DATA ANALYSIS	159
5.1	Research Questions and Hypotheses.....	159
5.2	Analytic Strategy.....	162
5.3	Participants and Procedure	166
5.4	The Reliability and Consistency of Measures at Time1 and Time2	169
5.5	Comparison of Descriptive Statistics and Correlations between Constructs over Time 1 and Time 2	171

5.6	The Temporal Stability of the Measurement Model	174
5.7	Longitudinal Structural Model of Panel Data	183
5.8	Testing the Direct, Indirect, and Total Effects through Multiple Mediators (Hypotheses 1 to 10)	185
5.9	Testing the Indirect Effects through Individual Mediator	193
	(Hypotheses 11 to 20)	193
	CHAPTER 6: DISCUSSION AND CONCLUSIONS	208
6.1	Summary of the Main Findings from the Cross-sectional Structural Model	209
6.2	Summary of the Main Findings from the Longitudinal Structural Model ...	209
6.3	High-involvement and Employee Engagement	211
6.4	High-involvement and Trust in Employer	213
6.5	High-involvement and Organisational Justice	215
6.6	High-involvement and Organisational Politics	218
6.7	Organisational Justice and Employee Engagement	220
6.8	Organisational Justice and Trust in Employer	222
6.9	Organisational Politics and Employee Engagement	225
6.10	Organisational Politics and Trust in Employer	226
6.11	HIWPs and Employee Engagement – the Mediating Role of Organisational Justice and Politics	229
6.12	HIWPs and Trust in Employer – the Mediating Role of Organisational Justice and Politics	230
6.13	Strengths and Limitations	231
6.14	Practical Implications	234
6.15	General Suggestions for Future Research	235
6.16	Conclusions	236
	References	238
	Appendix A. Banks’ Branch Addresses and Surveys Distribution Summary .	287
	Appendix B. Ethics Application Approval	300
	Appendix C. Participant Information Sheet	301
	Appendix D. The Questionnaire	303
	Appendix E. Normal Probability Plots	313
	Appendix F: Frequency Histograms	322
	Appendix G. Assessment of Normality	332

LIST OF TABLES

	Page
Table 1. Banks Types and their Number of Branches in Pakistan.....	54
Table 2. Number of Banks and Branches Included in the Present Study.....	57
Table 3. Division of Selected Cities into Possible Clusters by Area.....	58
Table 4. Frequency Distribution of Bank-wise Response Rate.....	60
Table 5. Frequency Distribution of Bank Wise Survey in Each City.....	62
Table 6. Cutoff Values Criteria for Goodness-of-Fit Indices	73
Table 7. Comparison of CFA of HIWPs Factorial Structure	83
Table 8. Standardised and Unstandardised Parameter estimates (factor loadings) for HIWPs Measurement Items	84
Table 9. Comparison of Alternative CFA Models of Organisational Justice.	91
Table 10. Standardised and Unstandardised Factor Loadings of Organisational Justice Measurement Items	92
Table 11. Comparison of Alternative CFA Models of Organisational Politics	100
Table 12. Standardised and Unstandardised Factor Loadings Organisational Politics Items	101
Table 13. Comparison of Alternative CFA Models of Employee Engagement	107
Table 14. Standardised and Unstandardised factor loadings of Employee Engagement Items	108
Table 15. Standardised and Unstandardised Factor Loadings of Trust in Employer Items.....	112

Table 16. Comparison of Fit Statistics of Alternative Measurement Models.....	118
Table 17. Standardised and Unstandardised Factor Loadings of the Final Measurement Model Items.....	119
Table 18. Descriptive Statistics, Skewness, Kurtosis, and Z-Statistics of Latent Variables	126
Table 19. Test of Homogeneity of Variance between Male and Female Respondents	127
Table 20. Multicollinearity Test of the Independent Variables	128
Table 21. Descriptive Statistics, Cronbach α 's, and Correlations	129
Table 22. Comparison of Fit Statistics of Alternative Structural Models of Time 1 Data.....	134
Table 23. Direct, Indirect, the Unstandardised Estimates of the Total Effects, and r^2 Values	140
Table 24. Direct, Indirect, and Total effects of the Independent Variables (IV) on Dependent Variables (DV) through each Mediating Variable	147
Table 25. Summary of Results – the Cross-sectional Structural Model	154
Table 26. Comparison of Descriptive Statistics of Survey Participants at T1 and T2	169
Table 27. Cronbach's Alpha (α) Reliability Estimates and Intraclass Correlations Coefficients of Measurement Instruments	170
Table 28. Comparison of Means, Standard Deviations, and Variances for Study Variables at Time 1, Time 2, and Change Scores	171
Table 29. Inter-correlations among Study Variables at Time 1 and Time 2	173

Table 30. Time 1 and Time 2 Factor Loadings of Items in the Final Measurement Model	178
Table 31. Direct, Indirect, and Total Effects' Unstandardised Estimates and r^2 Values	185
Table 32. Direct, Indirect, and Total effects of Independent Variables on Dependent Variables through each Mediating Variable	191
Table 33. Summary of the Results – the Longitudinal Structural Model	200

LIST OF FIGURES

	Page
Figure 1. Hypothesised Partial Mediation Model	52
Figure 2. CFA of HIWPs Measurement Instrument a Second-order Latent Variable Comprised First-order Four Distinct Variables	82
Figure 3. CFA of Organisational Justice Measurement Instrument as a First-order Four-factor Latent Variable	90
Figure 4. CFA of Organisational Politics Measurement Instrument as a Second-order Latent Variable Comprised Three First-order Factors.....	99
Figure 5. CFA of Employee Engagement Measurement Instrument as a Second-order Latent Variable Comprised Three First-order Factors.....	106
Figure 6. CFA of Organisational Trust Measurement Instrument as a Unidimensional Latent Variable	111
Figure 7. CFA of the Final Measurement Model	117
Figure 8. Partial Mediation Model with all Paths Estimated in the Study...	133
Figure 9. Integrated Theoretical Model Based on the Cross-sectional Structural Model Findings	158
Figure 10. CFA of the Measurement Model with Time 2 Data	177
Figure 11. Longitudinal Structural Model of Change Scores	184
Figure 12. Integrated Theoretical Model Based on the Longitudinal Structural Model Findings	207

CHAPTER 1: INTRODUCTION

As hierarchies, close supervision, and job descriptions are disappearing at the most progressive employers, the rigid rule-books that once were the governing bibles of American workplaces also are on the path to extinction. Rules are the back bone of bureaucracy, stifling initiative and handcuffing employee efforts to respond to customer demands (O'Toole & Lawler, 2006, p. 59).

1.1 High-involvement Work Processes (HIWPs)

High-involvement management continues to attract significant attention among organisational practitioners and researchers alike (Marchington, 2015; Wood, Burridge, Rudloff, Green, & Nolte, 2015; Oppenauere & Van De Voorde, 2018). The term “high-involvement management” was first coined by Lawler (1986). Although no precise definition of high-involvement exists, Lawler (1986) conceptualised it in terms of four mutually reinforcing attributes: *power* (P), *information* (I), *rewards* (R), and *knowledge* (K) – also known as the PIRK model. *Power* refers to organisational practices that empower lower level workers to make decisions that concern them; *information* refers to organisational practices that regularly inform employees about their organisational performance, goals, and business strategy; *rewards* refer to designing performance-based pay and compensation systems; and *knowledge* refers to organisational practices that offer extensive training and development opportunities to employees (Benson & Lawler, 2003; Lawler, Mohrman, & Ledford, 1992).

Lawler (1986, p. 42) argues that, for effective employee-involvement, the four PIRK variables described above should be implemented simultaneously because

power without information, knowledge, and rewards leads to poor decisions; information and knowledge without power results in frustration because employees cannot use their expertise; rewards for performance without power, information, and knowledge leads to frustration and lack of motivation because employees cannot influence their rewards; and information, knowledge, and power without rewards leads to lack of motivation because employees generally work in order to achieve social as well as economic gains. In sum, the simultaneous implementation of PIRK variables creates the conditions necessary for high-involvement work processes (HIWPs), the term used in this study.

The principal idea behind HIWPs is that workers can influence organisational performance, if they know about it (information), are able to influence it (power), are rewarded for it (rewards), and have the knowledge and skills to contribute to it (knowledge) (Lawler, 1988). More specifically, in initiating HIWPs, managers aim to empower lower level employees to make decisions and solve work-related problems (Boxall & Macky, 2014), something that has typically been reserved for management (Leana, Ahlbrandt, & Murrell, 1992).

1.2 Empirical Evidence on the Effectiveness of HIWPs

A still growing body empirical evidence has demonstrated that HIWPs are positively associated with various measures of organisational effectiveness such as employee well-being (Macky & Boxal, 2008; Bockerman, Bryson, & Ilmakunnas, 2012), job satisfaction (Boxall & Macky, 2014; Mohr & Zoghi, 2008), organisational productivity (Guthrie, 2001), employee morale (Vandenberg, Richardson, & Eastman, 1999), trust in organisation (Searle et al., 2011), and better work life balance (Boxall & Macky, 2014). Empirical studies have also demonstrated that HIWPs are negatively associated with undesirable organisational outcomes such as

turnover intentions (Guthrie, 2001; Vandenberg et al., 1999), depression (Mackie Holahan, & Gottlieb, 2001), and not related to stress and fatigue (Boxall & Macky, 2014).

A few studies have also examined the relationship between perceived employee involvement climate and organisational effectiveness at group/unit level. For example, Smith, Wallace, Vandenberg, and Mondore (2016) found that employee-involvement climate at a group level is positively associated with group task performance and group citizenship performance. Richardson and Vandenberg (2005) found that a work unit's climate of employee involvement is positively associated with citizenship behaviour and negatively associated with absenteeism and turnover. Similarly, Riordan, Vandenberg, and Richardson (2005) found that perceived employee involvement climate is positively associated with corporate financial performance, employee morale, and negatively associated with turnover rate.

More recently, some researchers have also attempted to explore the mediating variables through which HIWPs exert their influence on employee and employer outcomes. For example, Butts, Vandenberg, DeJoy, Schaffer, and Wilson (2008) found that HIWPs are positively associated with psychological empowerment, which in turn, leads to job satisfaction, organisational commitment, and job performance. Kizilos, Cummings, and Cummings (2013) found that HIWPs are positively associated with organisational citizenship behaviour, which in turn, leads to organisation-unit performance. Similarly, Boxall, Hutchison, and Wassenaar (2015) found that HIWPs are positively related to intrinsic job satisfaction and affective commitment, and these relationships are mediated through the intrinsic motivation and skill utilisation of employees.

Although the growing evidence mentioned above suggests a “win-win” situation for both employees and their employers, findings from a handful studies have raised concerns over the mutual gains perspective of HRM. For example, Wood, Veldhoven, Croon, and de Menezes (2012) distinguish between role-level involvement (enriched job design) and organisational-level involvement; and found that the former is associated with job satisfaction while later is associated with anxiety and job dissatisfaction. Similarly, in a more recent study, Wood and Ogbonnaya (2018) found that role-level involvement has positive effects on job satisfaction and employee well-being while organisational-level involvement is not significantly associated with these measures of employee outcomes. In another study, Oppenauer and Van De Voorde (2018) found that HIWPs have positive effects on work load and job responsibility which in turn lead to emotional exhaustion.

The results of studies on the relationships between HIWPs and outcomes are promising, and form an important research stream, however, they have not gone uncriticised. *First*, critical scholars maintain that the “how” question of such relationships has been rarely investigated (Boxall & Macky, 2014), and maintain that research incorporating mediating variables is necessary for a more nuanced theoretical explanation as to why a system of human resource management (HRM) is associated with some outcomes and not others (Boxall, Guthrie, & Paauwe, 2016).

Second, the mutual gains model implies that HRM should benefit both employees and employers, yet research has largely focussed on ways to improve organisational performance, with employee outcomes very much a secondary consideration (Guest, 2017). For example, the AMO (ability, motivation, and opportunity) framework has often been used to explain the theoretical link between

human resource (HR) practices and outcomes (e.g., Boxall et al., 2015), however, Boxall et al. (2016) note that “the other obvious thing about the AMO framework is that it is focussed on serving the goal of organisational performance rather than employee well-being (p. 104). Similarly, Guest (2017) argues that the resource-based view of the firm draws heavily on a human capital approach, however, the primary focus of this approach is to enhance organisational performance with little concerns for employee well-being. In summary, despite a large body of empirical evidence on the positive relationship between HRM and organisational effectiveness, there is still considerable debate regarding whether HRM benefits both employees and their organisations (e.g., Peccei, Van De Vroode, & Van Veldhoven, 2013; Boxall, 2013; Boxall & Macky, 2016). Therefore, researchers have argued that any claim that HIWPs impact organisational effectiveness via employee wellbeing has to be demonstrated in some tangible way, rather than assumed (Boxall & Macky, 2014).

Finally, despite methodological researchers concerns that tests of mediational models require longitudinal research designs (e.g., Maxwell, Cole, & Mitchell, 2011; Ployhart & MacKenzie, 2015; Ployhart & Vandenberg, 2010), most studies continue to use cross-sectional designs. Maxwell et al. (2011) argue that “a variable that is found to be a strong mediator in a cross-sectional analysis may not be a mediator at all in a longitudinal analysis” (p. 816). Similarly, Ployhart and Vandenberg (2010) note that “testing mediation using cross-sectional research designs may result in biased parameter estimates and inaccurate tests of hypotheses” (p. 118). The basic argument is that, since most of the organisational and psychological processes are not static but rather develop, change, and evolve over time, cross-sectional designs lead to weak hypotheses that are difficult to falsify (Pitariu & Ployhart, 2010).

Therefore, a longitudinal perspective is needed to demonstrate how changes in work

and employment practices lead to changes in employee attitudes and behaviours and, in turn, how these changes impact employee and employer outcomes (Ployhart & MacKenzie, 2015).

1.3 Research Aims and Questions

Drawing on the discussion above, this study attempted to address three research questions. First, how do HIWPs influence employee attitudes and behaviours? Second, do HIWPs live up to the mutual gains perspective of HRM? Third, do changes in employees' experiences of HIWPs lead to changes in their work attitudes and behaviours? To answer these research questions, twenty hypotheses were developed and tested using both cross-sectional and longitudinal research designs. As noted above, findings from previous studies are promising, however, evidence remains limited, and new perspective in research and theory on HIWPs is needed. This study aims to fill this gap.

1.4 The Basic Premise of this Study

The basic premise of this study is straightforward – *fairness within the workplace is important to employees*, and it matters for at least three reasons. First, given that people work for an organisation to receive economic (e.g., pay) as well as social benefits (e.g., status), fairness in the work provides them long-term control over valued outcomes, while unfairness jeopardises these (Folger & Cropanzano, 2001). Second, since people are concerned about their social identity, fairness in the workplace signals that they are a valued and esteemed member of an organisation, while unfairness communicates the opposite (Blader & Tyler, 2015). Third, as fairness is hard-wired into the human brain, fairness is important for its' own sake (Cropanzano, Massaro, & Becker, 2017). In sum, Folger and Cropanzano (2001)

point out that fairness in the workplace promotes the well-being of organisational members, while unfairness threatens it.

Fairness in organisations has been examined from two different perspectives: (a) organisational justice and (b) organisational politics. Organisational justice scholars suggest that employees evaluate fairness in organisations by judging the four facets of organisational justice: (a) the fairness of the outcomes they receive (distributive justice), (b) the fairness of the procedures used to distribute those outcomes (procedural justice), (c) the fairness of the explanations offered for those procedures (informational justice), and (d) the fairness of the interpersonal treatment they receive from those who have authority to make decisions such as supervisors (Colquitt, 2001; Cropanzano & Stein, 2009; Bies, 2015).

Justice scholars maintain that, when organisations treat their employees fairly, both employees and organisations benefit (Cropanzano et al., 2017; Cropanzano, Fortin, & Kirk, 2015). Employees benefit from less stress (Greenberg, 2004), better psychological health (Lawson, Noblet, Rodwell, 2009), and greater job satisfaction (Harris, Andrews, & Kacmar, 2007), whereas, employers benefit from enhanced job performance (Colquitt, LePine, Piccolo, Zapata, & Rich, 2012), citizenship behaviours (Fassina, Jones, & Uggerslev, 2008), and improved customer satisfaction (Cropanzano, Bowen, & Gilliland, 2007).

On the other hand, organisational politics has been viewed as a threat to fairness at the workplace (Cropanzano, Howes, Grandey, & Toth, 1997; Hochwarter, 2012). Organisational politics has been defined as “actions by individuals which are directed toward the goal of furthering their own self-interest, without regard for the well-being of others or their organisation” (Kacmar & Baron, 1999, p. 4). Examples of political behaviours include bypassing the chain of command to obtain

organisational resources, developing personal ties with authorities with the intent to gain promotion, taking undue credit of others' work, and making decisions based on favouritisms rather than merit (Harris et al., 2007). In other words, organisational politics refers to illegitimate and non-sanctioned self-serving behaviours that are often enacted behind the scenes to enhance self-interest at the cost of others and the organisation (Mintzberg, 1985; Ferris, Russ, & Fandt, 1989).

Based on the fairness perspective, the basic argument in this study is that, if HIWPs promise real mutual gains, then they should promote fairness in the workplace. Bowen, Gilliland, and Folger (1999) pointed out that the perceived fairness of HRM practices is one of the only ways that employees can evaluate the fairness of an organisation (Bowen et al., 1999, p. 9). However, despite robust research linking HIWPs with diverse outcomes, the relationship between HIWPs and perceived fairness in the workplace remains untested. In sum, the core premise of this study is that the assessment of perceived fairness in the workplace should be the acid test for mutuality in HRM and employment relations.

To this end, drawing on organisational justice theories (discussed in Chapter 2), this study attempts to test a dynamic multi-mediated model proposing that employees' experiences of HIWPs (power, information, rewards, and knowledge) promote perceptions of fairness in the workplace. In turn, such perceptions mediate the link between HIWPs and employee outcomes (employee engagement and trust in employer).

The rest of this thesis is structured as follows. Chapter 2 discusses the relevant literature and develops the conceptual framework and hypotheses. Chapter 3 outlines the research method. Chapters 4 and 5 present the results of the cross-

sectional and longitudinal structural models. Finally, Chapter 6 offers discussion, conclusions, limitations, and suggestions for future research.

CHAPTER 2: THE BACKGROUND LITERATURE AND HYPOTHESES

Justice, sir, is the greatest interest of man on earth. It is the ligament which holds civilized beings and civilized nations together.... And whoever labours on this edifice with usefulness and distinction, whoever clears its foundations, strengthens its pillars, adorns its entablatures, or contributes to raise its august dome still higher in the skies, connects himself – in name, and fame, and character – with that which is, and must be, as durable as the frame of human society.

Daniel Webster: *On Justice Story* (September 12, 1845).

2.1 HIWPs, Employee Engagement, and Trust in Employer

In the section below, first, HIWPs are described. Following a brief description of HIWPs, their hypothesised relationships with dependent variables, employee engagement and trust in employer, are discussed.

2.1.1 High-involvement Work Processes

Systems of human resource management termed “high performance work systems” (Appelbaum, Bailey, Berg, & Kalleberg, 2000), “high commitment management” (Walton, 1985), and “high involvement management” (Lawler, 1986) have excited considerable interest among both researchers and practitioners. One likely reason for this attention is the claim that such work systems produce beneficial effects for both employees and organisations (e.g., Combs, Liu, Hall, & Ketchen, 2006; Jiang, Lepak, Hu, & Baer, 2012), and are the most appropriate form of modern management to successfully negotiate the volatile and increasingly competitive economic environment (Wood & Wall, 2007). The common elements of these work systems is that they depart from traditional Taylorist forms of work organisation in

that they allow workers to have greater autonomy or discretion to organise, plan, and execute their job tasks (Boxall & Macky, 2009; Wood, 1999; Edward & Wright, 2001), something that has typically been reserved for top management (Leana et al., 1992).

However, which specific aspects of work and employment practices constitute such work systems remains a complex and controversial issue. Sun, Aryee, and Law (2007) note that “little consensus exists among researchers regarding the specific practices to be included in the configuration of high-performance human resource practices” (p. 558). Similarly, Macky and Boxall (2008) note that researchers have been “compiling a list of ‘best practices’ without establishing an internal logic for their chosen system” (p. 39). Consequently, it is hard to find two studies that have measured either high performance, high involvement, or high commitment work systems with the same work and employment practices and in the same way.

In addition, Wood and de Menezes (2008) and Wood and Wall (2007, p. 1368) note that researchers often treat terms like “high involvement”, “high commitment”, and “high performance” management as synonymous and assume that they are measuring the same phenomenon, however, “it is evident that they are not”. For example, Pfeffer (1998) writes “a plethora of terms have been used to describe such management practices: high commitment, high performance, high involvement, and so forth. I use these terms interchangeably, as they tap similar ideas about how to obtain profits through people” (p. 96). To make this case worse, Purcell (1999; Kinnie, Hutchinson, & Purcell, 2000) note that scholars from the UK often prefer to use the term “high commitment”, while, scholars from North America prefer to use the terms “high performance” and “high involvement” management. These

inconsistencies in the use of appropriate terminology and the inclusion of a vast array of work and employment practices, without their logical links with the chosen system, has impeded progress in the research and theory of human resource management. Kaufman (2012) proposed that 30 years of research on HRM arguably “deserves a failing grade” (p. 14).

Nonetheless, despite these complexities, more recently, some scholars have attempted to clarify the conceptual and theoretical differences underlying such terminologies. For example, Boxall and Macky (2009, 2014) suggest that each term (high performance, high involvement, or high commitment) reflects the dominant theme underlying the managerial orientation about the management of work and people. In other words, the term “high performance” refers to organisational practices that aim to enhance organisational performance or the bottom-line; the term “high commitment” refers to organisational practices that aim to enhance employee commitment; and the term “high involvement” refers to organisational practices that aim to enhance employee involvement in decisions that concern them (Boxall & Macky, 2009; Wood, 1999; Bryson, Forth, & Kirby, 2005).

To this end, this study considers the differences in underlying conceptualisation of work and employment practices and consciously uses the term “high-involvement work processes”. The merit of using this label is that “it does not convey any inherent assumption that a particular set of management practices is necessarily performance enhancing” (Bryson et al., 2005, p. 460). While, “the term ‘high performance’ clearly presupposes the very effects researchers should be investigating, and should be avoided” (Wall & Wood, 2005, p. 544). In advancing the case for high involvement, Boxall and Macky (2009) also stress that “attempts to define HPWSs solely through identifying a set of practices are fundamentally

flawed” (p. 7). Similarly, the term high involvement is also preferred over high commitment in this study as Boxall and Macky (2009) note that commitment can be achieved through employment practices alone (e.g., job security, higher pay, bonuses, and procedural justice) without job design initiatives. Thus, the term high-involvement is multifaceted and reflects the change in management philosophy contrary to the narrow job specifications and rigid division of labour associated with Taylorist work designs (Boxall & Macky 2009; Wood et al., 2015).

In addition, this study subscribes to Lawler’s (1986) notion of “high involvement management” which has been recognised as one of the most developed and referenced approaches used to conceptualise employee involvement (Kizilos et al., 2013; Smith et al., 2016; Boxall & Macky, 2014, 2016). As stated in Chapter 1, Lawler (1986) conceptualised high involvement in terms of four mutually reinforcing attributes: power, information, rewards, and knowledge (PIRK). To operationalise these four PIRK variables in empirical research, Vandenberg et al. (1999) developed a 32-item scale to measure the extent to which employees perceive that they have (a) power to make decisions that concern them and opportunities to make suggestions in wider organisational decisions, (b) information about organisational processes, performance, events, and feedback, (c) rewards in place tied to organisation and individual’s performance, and (d) opportunities to enhance their work and business related skills and knowledge. Conceptualising and measuring HIWPs through employees’ experiences of PIRK clarifies the approach to HRM taken in this study. As Wood and Wall (2007) note, “the acid test of the authors’ orientations towards of HRM is the choice of practices that they include in their measure of it” (p. 1357).

2.1.2 HIWPs and Employee Engagement

The last decade has seen a burgeoning interest in the concept of employee engagement (Saks & Gruman, 2014). Although numerous conceptualisations of employee engagement exist, perhaps, the work of Kahn (1990) is the most influential; Kahn defined engagement as “the harnessing of organisation members’ selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performance” (p. 694). Another widely cited definition of engagement is offered by Schaufeli, Salanova, Gonzalez-Roma, and Bakker (2002) who defined engagement as “a positive, fulfilling, work-related state of mind, characterized by vigour, dedication, and absorption” (p. 74). Although some scholars treat engagement and burnout as opposite ends of the same continuum (e.g., Maslach & Leiter, 2008), others consider engagement and burnout as two separate constructs (e.g., Moliner, Martinez-Tur, Ramos, Peiro, & Cropanzano, 2008; Schaufeli, Bakker, & Salanova, 2006). While some question the discriminant validity of engagement and believe that it is spurious reframing, or “old wine in a new bottle” (Macy & Schneider, 2008; Guest, 2014, Newman & Harrison, 2008), others have called for further research to clarify the status of employee engagement (e.g., Cole, Walter, Bedeian, & O’Boyle, 2012).

Definitional issues aside, a growing body of literature suggests that employee engagement is a positive, fulfilling, work-related state of mind and, as such, plays a key role in an organisation’s success and competitiveness (Gruman & Saks, 2011; Schaufeli & Bakker, 2004). Based on Kahn’s (1990) conceptualization of engagement, Rich et al. (2010) argue that engaged employees harness their full selves (hands, head, and heart) to work roles, whereas disengaged employees withhold their physical, cognitive, and emotional energies. Furthermore, engaged

employees create their own positive feedback, appreciate their contribution, and recognize their success and, unlike workaholics, also enjoy things outside work (Bakker, Albrecht, & Leiter, 2011). More specifically, engaged employees seem to play an important role in organisational effectiveness.

Because of the potential for enhanced organisational performance, the question of what creates engagement has been central in many studies. In theorising engagement, Kahn (1990) identified three psychological conditions that drive employee engagement: meaningfulness, safety, and availability. Psychological meaningfulness refers to employees' perceptions that their work is meaningful and that they are receiving a return on their investments in their jobs; psychological safety refers to employees' perceptions that it is safe to "employ one's self" without fear of negative consequences to their status or career; and psychological availability refers to employees' perceptions that they possess the resources to personally engage in role performances (Kahn, 1990).

Based on Kahn's (1990) seminal theory of employee engagement, Crawford, Rich, Buckman, and Bergeron (2014) identified several organisational factors associated with each psychological condition mentioned above. They found that job challenge, autonomy, variety, feedback, opportunities for development, and rewards and recognition, predict psychological meaningfulness; fairness, quality of leader-member exchange, social support (the extent to which the organisation values employees contribution and cares for their well-being), and a workplace climate of safety and achievement predict psychological safety; and role overload, work-role conflict, family-work conflict, and resource inadequacies negatively predict psychological availability (Crawford et al., 2014).

Similarly, the job demands and resources (JD-R) framework (Bakker & Demerouti, 2007) suggests that when employees are provided with job resources they are more likely to be engaged. Examples of job resources include control or autonomy over job tasks, opportunities to participate in organisational decision making, management initiatives for employees' development and growth, incentives, rewards, and feedback on performance (Bakker & Demerouti, 2007; Bakker, Demerouti, & Sanz-Vergel, 2014). Based on the JD-R framework, Saks (2017) maintains that physical, social, and psychological job resources such as autonomy, performance feedback, and opportunities for development are important predictors of employee engagement.

A review of the literature above reveals that the organisational factors and job resources that predict engagement can be mapped closely to HIWPs. For example, employee involvement and participation in decision making through power/autonomy is the core attribute of HIWPs. Similarly, opportunities for development and feedback on performance can be conceptualised as akin to information and knowledge attributes of HIWPs. While the incentives, recognition and rewards of the JD-R framework are related to the rewards attribute of HIWPs. Finally, as Crawford et al. (2014) note, work-role conflict and family-work conflict negatively predict the psychological availability of employees, and previous research suggest that HIWPs are associated with better work-life balance (Boxall & Macky, 2014). Therefore, drawing on the JD-R framework (Bakker & Demerouti, 2007) and Crawford et al.'s (2014) organisational factors predicting three psychological conditions necessary for engagement, it is hypothesised that:

Hypotheses 1: HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Employee Engagement.

2.1.3 HIWPs and Trust in Employer

Trust is essential because it allows individuals and groups to manage interdependence more easily without questioning the intent of one another and without making formal agreements on certain issues (Mishra & Mishra, 2012). Trust reduces uncertainty and fosters a sense of obligation to behave reciprocally (Colquitt et al., 2012). Social exchange theory predicts that a positive initiating action of an organisation may enhance trust, and this increased trust may promote positive outcomes for both individuals and organisations (Cropanzano, Anthony, Daniels, & Hall, 2017) such as job satisfaction (Edwards & Cable, 2009), affective organisational commitment (Tremblay, Cloutier, Simard, Chenevert, & Vandenberghe, 2010), and organisational citizenship behaviour (Mayer & Gavin, 2005).

Given the importance of trust in social exchange relationships, researchers have offered various definitions of it. Lewis and Weigert (1985) conceptualised trust as “the undertaking of a risky course of action on the confident expectation that all persons involved in the action will act competently and dutifully” (p. 971). Rousseau, Sitkin, Burt, and Camerer (1998) defined trust as a “psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another” (p. 395). Robinson (1996) defined trust as “one’s expectations, or beliefs about the likelihood that another’s future actions will be beneficial, favourable, or at least not detrimental to one’s interests” (p. 576).

Another more behavioural definition of trust, which is adopted in this study, came from Mayer, Davis, and Schoorman (1995). They defined trust as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor,

irrespective of the ability to monitor or control that other party” (Mayer et al., 1995, p. 712). This definition and those cited above have one thing in common that trust itself is not *taking risk*, but it is the *willingness to take risk* in the relationships (Schoorman, Mayer, & Davis, 2016). Therefore, researchers have devoted a great deal of effort to identify what factors foster an individual’s willingness to take risk. In other words, why do people trust?

Mayer et al. (1995) provide two broad answers to the question: why do people trust? First, because people have trusting dispositions, and second, because the other party is trustworthy. The propensity to trust, or a trusting disposition, refers to the general willingness of a person to trust others in the absence of information about the other party (Mayer et al., 1995). Propensity has been proposed as a within-individual stable personality characteristic influenced by various factors such as cultural background, previous experiences, and personality type (Mayer et al., 1995).

Although trust propensity is an important factor in predicting trust, it has limited ability to explain trust because people do not trust everyone equally (Baer & Colquitt, 2018). Why do people not trust everyone equally? Lewis and Weigert (1985; Mayer et al., 1995) suggest that it is because the trustor perceives that some people are more trustworthy than others. What makes people more or less trustworthy? Mayer et al. (1995) suggest that the trustworthiness comprises three characteristics of the trustee: ability, benevolence, and integrity. Ability refers to the perceptions of the trustor about the skills and competencies of the trustee; benevolence refers to the perceptions of the trustor of how much a trustee cares about the trustor; and finally, integrity refers to the perceptions of the trustor that the trustee adheres to some principles that the trustor finds acceptable (Mayer et al., 1995, p. 717-719).

In the years since Mayer et al.'s (1995) theory of trust, researchers have proposed a number of factors that can enhance the trustworthiness of an organisation, a supervisor, or a co-worker. For example, Whitener, Brodt, Korsgaard, and Werner (1998) suggest that sharing and delegating control and including employees in participation fosters trust between employees and their employer because such work practices reduce employees' vulnerability and increase the likelihood of favourable outcomes. They also suggest that decentralised, less formal, and less hierarchical organisations are more likely to promote trust because such organisational structures allow employees involvement in decision making and opportunities to voice opinions (Whitener et al., 1998).

Similarly, Taylor, Tracy, Renard, Harrison, and Carroll (1995) point out that employees' participation in decisions that concern them, such as giving input to the performance appraisal process, serves to enhance trust toward the organisation as it signals to employees that the organisation intends to treat them in a fair way. This is consistent with relational model of authority, which postulates that allowing participation in decisions communicates to employees' whether they are respected, valued, and esteemed by authorities, or merely a marginal member of an organisation (Blader & Tyler, 2015). Similarly, Korsgaard, Brodt, and Whitener (2002) suggest that open communication, information, and showing concern for employees promotes trust because these HRM practices show fairness in the behaviour of authorities.

Consistent with the above theorisation is the notion of HIWPs being manifested through power, information, rewards, and knowledge practices. Lawler (1988) suggests that HIWPs emphasise flat or decentralised organisational structures so employees have the opportunity to influence decisions that concern them (Lawler,

1988). Similarly, Lawler et al. (1992) conceptualised high-involvement organisations as where employees, particularly those who are close to actual work, have the power to make decisions concerning the conduct of their jobs, have feedback and information regarding their own as well as organisational performance, have opportunities to acquire skills and knowledge to make competitive decisions, and have fair rewards for their participation and performance. Wood and Wall (2007) also note that the notion of high involvement comprises both job-level involvement and organisational-level involvement; the former is achieved through work enrichment, while the latter is achieved through opportunities for voice. Therefore, it is hypothesised that:

Hypotheses 2: HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Trust in Employer.

2.2 HIWPs and Organisational Justice

The section below discusses the concepts and theories of organisational justice and examines the potential relationships between HIWPs and organisational justice.

2.2.1 Organisational Justice

Organisational justice refers to “people’s perceptions of fairness in organisations” (Colquitt, Greenberg, & Zapata-Phelan, 2005, p. 5). Traditionally, organisational justice scholars have tended to use the terms “justice” and “fairness” interchangeably. However, recently, researchers have suggested that “this conceptual strategy may have run its course” as justice and fairness are not the same thing (Goldman & Cropanzano, 2015, p. 313). Similarly, Colquitt and Zipay (2015) suggest that, as more and more researchers are operationalising both “justice” and

“fairness” in their research as separate constructs, the time has come to differentiate them.

Colquitt and Rodell (2015) defined *justice* as “the perceived adherence to rules that reflect appropriateness in decision contexts”, while they defined *fairness* as “a global perception of appropriateness” (p. 188). Similarly, Goldman and Cropanzano (2015) suggest that “‘justice’ should refer to whether one adheres to certain rules or standards, while ‘fairness’ should refer to how one responds to perceptions of these rules (and rule compliance)” (p. 313). They maintain that “justice describes normative standards and how these are implemented; fairness describes reactions to those standards” (Goldman & Cropanzano, 2015, p. 315). According to these distinctions, fairness is the outcome of justice rules perception – “a perception that tends to lie theoretically downstream of justice” (Colquitt & Zipay, 2015, p. 76).

Consistent with prior research, the focus of this study is to assess the extent to which employees perceive that decision-making authorities in their organisations adhere to justice rules reflecting distributive, procedural, interpersonal, and informational justice. These justice rules are discussed in the sections that follows as they serve as the antecedents of justice perceptions. Whether HIWPs influence employees’ perceptions of distributive, procedural, interpersonal, and information justice remains an open yet critical question and, as Rawls (1971) notes “justice is the first virtue of social institutions, as truth is of systems of thought” (p. 3).

2.2.2 HIWPs and Distributive Justice

Historically, the first type of justice to be identified was distributive justice which refers to the perceived fairness of outcomes received (Cropanzano, Prehar, &

Chen, 2002). Adams's (1963, 1965) equity theory remains the dominant theory of distributive justice. According to equity theory, people compare their investments-rewards ratios with referent others. When they perceive that the ratio of their rewards to investments and the ratio of others' rewards to others' investments are equal, they perceive equity or distributive justice; or, when they perceive that the ratio of their rewards to investments and the ratio of others' rewards to others' investments are unequal, they perceive inequity or distributive injustice (Adams, 1965). Examples of an individual's investments (inputs) include his/her education, intelligence, experience, training, seniority, age, gender skills, and importantly the efforts an individual expends on the job; while examples of rewards (outcomes) include pay, promotion, fringe benefits, job status, and seniority benefits an individual receives in return for those investments (Adams, 1963).

In addition to the equity rule of distributive justice, Deutsch (1975) also identified two rules that influence an individual's perception of distributive justice: the equality rule and the need rule. Equality refers to when all individuals receive the same regardless of their contribution, while need refers to when an individual receives a greater benefit (outcome) based on his/her personal requirements (Deutsch, 1975). There seems to be a general consensus among justice scholars that perceived distributive justice is fostered when outcomes are perceived to be consistent with appropriate allocation norms (also known as distributive justice rules) such as need, equality and equity (Colquitt, 2001). However, in most business contexts, equity remains the most dominant principle of distributive justice (as opposed to relative to equality or need), as a person who is paid equally to another may feel injustice if he/she perceives that his/her contribution to an organisational performance is substantially greater than the others (Cropanzano et al., 2007).

Given the very fact that people work for an organisation to receive economic gains and social status, distributive justice remains the dominant lens through which employees evaluate the fairness of HR practices. Although not yet empirically tested, conceptually, it seems that HIWPs may influence employees' perceptions of distributive justice through influencing the equity rule. HIWPs theorists emphasise that, for effective high-involvement, two conditions are necessary: first, all employees participate in decisions that concern them, and second, all employees receive rewards and recognition based on their individual contribution (O'Toole and Lawler, 2006). They further argue that when managers give workers authority (power/autonomy) to make decisions and reward them for doing the right things, they address the basic human needs for recognition, control, and belonging (O'Toole & Lawler, 2006).

Similarly, Lawler, Mohrman, and Benson (2001) argue that HIWPs emphasise rewarding employees for their skills, knowledge, and capabilities, and encourage open and transparent reward information, to ensure that employees understand how they are paid or rewarded. Benson and Lawler (2003) have made a similar point, stating that a key to effective employee-involvement management is fairly compensating employees for their inputs in organisational performance. In summary, HIWPs are in harmony with the distributive justice rule (equity) in that they emphasise rewarding employees based on their personal investments such as skills, knowledge, abilities, and efforts to contribute in organisational performance. Therefore, it is hypothesised that:

Hypotheses 3: HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Distributive Justice.

2.2.3 HIWPs and Procedural Justice

While the early research on organisational justice focussed on the question of how employees evaluate the fairness of the outcomes (equity, equality, and need rules), more recent research suggests that employees are not only concerned with the outcomes received but also how they are distributed, which led to the concept of procedural justice (Bobocel & Gosse, 2015). Procedural justice has been defined as the fairness of the processes used to determine outcomes distribution (Colquitt, 2001).

How do employees evaluate the fairness of a decision-making process? In his theory of procedural justice, Leventhal (1980) identified six procedural justice rules: (1) consistency, (2) bias-suppression, (3) accuracy, (4) correctability, (5) representativeness, and (6) ethicality. The consistency rule suggests that procedures should be consistent across persons and time; the bias-suppression rule suggests that procedures should be neutral, un-biased, and without self-interest of the decision making authority; the accuracy rule dictates that the decision-making procedures should be based on accurate and complete information; the correctability rule dictates that people should have opportunities to appeal and reverse any decision; the representativeness rule suggests that people who will be affected by the decision should have opportunities to voice their concerns; and finally, the ethicality rule dictates that procedures should uphold some moral and ethical standards acceptable to an individual (Leventhal, 1980). According to Leventhal (1980), each procedural rule is critical and enhances the fairness of the decision-making procedure and, thus the fairness of the outcomes. For example, if decisions are made consistently, without bias, and on the basis of accurate information, employees are more likely to believe that they will receive their fair share over time (Brockner, 2010).

In addition to the six procedural justice rules described above, Thibaut and Walker (1978) suggest that procedures are perceived as fair when the recipients of decisions have at least two elements: “control over the decision and control over the process” (p. 546). Control over the decision refers to the extent to which an individual or a group has power to make decision; while control over the process refers to the extent to which people have opportunities to voice their opinion or present information or evidence related to the decision-matter. In sum, Thibaut and Walker (1978) suggest that people have an innate desire to have control over what happens to them, therefore, having control over the process and control over the decision influences their perceptions of procedural justice.

Both Thibaut and Walker’s (1978) “control model of justice” and Leventhal’s (1980) “justice judgement model” continue to dominate how procedural justice is conceptualised and assessed in current research (Rodell, Colquitt, & Baer, 2017). Based on control model and justice judgement model, researchers have developed some theoretical models of procedural justice such as the group value model, (Lind & Tyler, 1988), the relational model of authority (Tyler & Lind, 1992), and the group engagement model (Tyler & Blader 2003). The common theme underlying these models is that employees care about procedural justice because it communicates to them the nature of their relationship with the decision-making authority or the organisation (Blader & Tyler 2015). For example, fair processes communicate to employees that they are valued, respected, and esteemed members of the organisation, while unfair processes communicate the opposite message (Blader & Tyler, 2015).

Taking the above into consideration, HIWPs may influence employees’ perceptions of procedural justice in many ways. First, HIWPs may enhance

employees' sense of "process control", the central tenet of Thibaut and Walker's (1978) control theory of procedural justice. As Benson and Lawler (2003) point out, HIWPs provide opportunities to lower-level workers to voice their opinion and participate in organisational making. Wood and Wall (2007) also note that HIWPs are not only associated with job level-involvement which is achieved through decentralisation of decision making, but also organisational-level involvement which is achieved through voice or organisational empowerment.

Second, Leventhal's (1980) procedural justice rules can be more easily and frequently applied in high involvement organisations. For example, as the "representativeness rule" reflects the extent to which people's concerns are taken into account, HIWPs also rest on the idea of workers' participation in decisions of concern to them. Similarly, while "the accuracy" and "the correctability" rules suggest that decision-making procedures should be based on complete information and there should exist opportunities to modify or correct decisions, HIWPs promote top-down and bottom-up open communication between employees and management which provides opportunities for workers to present information regarding their performance. Leventhal (1980), in explaining the accuracy rule, state that "procedural fairness is violated when performance is evaluated on the basis of inappropriate information" (p. 27). Furthermore, as "the bias-suppression" rule suggests that the allocative procedures should be free from the personal interests of the decision-making authority, and "the consistency" rule dictates that the allocative procedures should be consistent across persons and time, HIWPs emphasise merit-based reward systems or pay-for-performance to ensure that each individual receives fair rewards based on his/her contribution to organisational performance (Benson, Young, & Lawler, 2006).

Third, an important research stream has also examined the relationship between various aspects of organisational structure and perceptions of procedural justice. According to this line of inquiry, decentralised organisational structure is positively related to procedural justice because in such structures employees have an opportunity to give inputs and voice their opinion (Schminke Ambrose & Cropanzano, 2000; Schminke, Cropanzano, & Rupp, 2002; Andrews & Kacmar, 2001; Schminke, Johnson, & Rice, 2015). Accordingly, HIWPs may predict procedural justice as decentralisation, or power sharing, are the key features of high-involvement organisations (Boxall & Macky, 2014).

Finally, the relational models discussed above suggest that people evaluate procedural fairness using relational criteria (Blader & Tyler, 2015). According to this view, opportunities for voice and participation influence procedural justice judgements because such processes safeguard employees' long-term interests and communicate with them about their social standing/status in an organisation. Consistent with the relational models and the relationship between organisational structure and procedural justice is the notion of HIWPs which emphasise on distributing power/autonomy to the lowest echelon of the organisational hierarchy, reducing the status distinction between workers and managers, and considering employees as valuable members who want to contribute to organisational performance (Lawler, 1988; Lawler & Mohrman, 1987).

Taken together, HIWPs may enhance employees' perceived control over the decision-making processes, uphold the procedural justice rules specified by Leventhal (1980), and communicate to employees that they are valued, respected, and esteemed members of the organisation. Therefore, it is hypothesised that:

Hypotheses 4: HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Procedural Justice.

2.2.4 HIWPs and Interactional Justice (interpersonal and informational)

Traditionally, organisational justice has been conceptualised as a two-factor model – distributive justice and procedural justice, however, in the mid 1980s, a third type of justice was introduced termed interactional justice. Interactional justice refers to the quality of the interpersonal treatment employees receive from decision making authorities such as supervisors or managers (Bies & Shapiro, 1987).

Historically, interactional justice was conceptualised under the broad concept of procedural justice, however, Bies and Moag (1986, as cited in Bies, 2001, 2005, 2015) suggested that both are distinct dimensions of organisational justice and should be measured separately. Bies and Shapiro (1987) suggest that procedural justice reflects the fairness of the structure of a decision-making process, while interactional justice reflects the fairness of the interpersonal treatment received during the enactment of a decision-making process. Later however, interactional justice was further subdivided into two separate constructs – interpersonal justice and informational justice (Colquitt, 2001). With the introduction of the interpersonal and informational justice dimensions, most researchers now treat organisational justice as a four-factor construct (Colquitt, 2001; Rupp, Shapiro, Folger, Skarlicki, & Shao, 2017; Cropanzano et al., 2015).

Greenberg (2006) suggests that interpersonal justice is most likely to occur when authority figures treat employees with respect, dignity, and politeness; while informational justice is most likely to occur when supervisors provide thorough, accurate, truthful, and complete explanations to employees about decisions that

concern them. Bies (2015) argues that people view themselves as “sacred”, and violation of that sacred self is both personal and painful. When employees perceive that they have not been treated with respect, dignity, and politeness (interpersonal justice), and have not been provided justifications or explanations for why and how a decision is made (informational justice), they perceive that violation of that sacred self or interactional injustice has occurred (Bies, 2015).

Similarly, Tyler and Lind (1992) suggest that because employees are concerned about their social standings in a group or an organisation, fair interpersonal treatment affirms their social identity and full membership within a valued group. Therefore, fair interpersonal treatment is highly important to workers because they wish to be accepted by the organisation or group to which they belong (Greenberg, 2009). In this perspective, allowing employees to provide inputs in organisational processes may enhance their perceptions of interactional justice because it signals to them that organisational authorities adhere to some moral principles and have intentions to treat them fairly (Kernan & Hanges, 2002).

Although interactional justice (interpersonal and informational) largely depends on an individual supervisor’s discretion (Bies, 2001; Greenberg, 2006), HIWPs may create an organisational environment in which employees are treated with dignity and respect and provided explanations or justifications for decisions of concern for them. For example, Lawler (1994) argues that HIWPs emphasise structural changes which promote democratic supervision and changes in supervisors’ behaviours and the role they play. For effective employee involvement, it is highly important to treat employees appropriately as they want managers who behave in ways that are respectful, fair and ethical during the enactment of decision making processes (Lawler, 2003).

Similarly, Lawler and Mohrman (1987) point out that HIWPs emphasise substantial flattening of the organisational structures and consciously blur the demarcation between employees and managers. In high-involvement work organisations, the role of supervisors is to facilitate workers rather than to exert control over them because in such work systems the lower-level employees are considered responsible and valuable members of the organisation (Lawler, 1994). In other words, high-involvement organisations are egalitarian workplaces with little class distinction between workers and supervisors, and where every employee is considered as a valued member of the organisation (O'Toole & Lawler, 2006).

HIWPs theorists also emphasise that the first step towards effective employee-involvement and participation is open and honest communication (Lawler et al., 2001; Benson, Kimmel, & Lawler, 2013). There should be no surprise for workers at the time of their performance appraisal regarding measures of performance, and they should have an opportunity to provide inputs during the performance appraisal (Lawler, 2003). More specifically, as Macky and Boxall (2008) point out, HIWPs provide opportunities for employees for greater information regarding organisational policies and procedures, reasoning behind critical organisational decisions, and opportunities to voice their concerns, it is hypothesised that:

Hypotheses 5: HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Interpersonal Justice.

Hypotheses 6: HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Informational Justice.

2.3 HIWPs and Organisational Politics

Numerous definitions of organisational politics exist. Ferris et al. (1989) defined organisational politics as “a social influence process in which behaviour is strategically designed to maximise short-term or long-term self-interest, which is either consistent with or at the expense of others’ interests” (p. 145). Witt, Andrews, and Kacmar (2000) defined organisational politics as a phenomenon in which “organisational members attempt either directly or indirectly to influence other members by means not sanctioned by formal standard operating procedures or informal norms, in an attempt to achieve personal or group objectives” (p. 342). Mintzberg (1983) conceptualised politics as “individual or group behaviour that is informal, ostensibly parochial, typically divisive, and above all, in the technical sense, illegitimate – sanctioned neither by formal authority, accepted ideology, nor certified expertise (though it may exploit any one of these)” (p. 172). Another influential and widely cited definition of organisational politics was offered by Kacmar and Baron (1999) who defined it as “actions by individuals which are directed toward the goal of furthering their own self-interest, without regard for the well-being of others or their organisation” (p. 4).

The common theme in the definitions cited above clearly suggests that organisational politics is a negative phenomenon and its presence has negative implications for both employees and their organisations. Second, most researchers in the field agree with Gandz and Murray’s (1980) assertion that it is the perception of organisational politics rather than reality which affects individuals and organisations (e.g., Ferris, Perrewe, Daniels, Lawong, & Holmes, 2017). Given that perceptions of organisational politics have negative implications for individuals and their

organisations, prior research has attempted to identify factors that enhance or reduce perceptions of organisational politics.

Ferris et al.'s (1989) conceptual framework remains the most comprehensive model outlining antecedents and consequences of perceptions of organisational politics. They suggest three categories of variables that influence perceptions of organisational politics: (a) organisation influences, (b) job/work environment influences, and (c) personal influences (Ferris et al., 1989). Organisation influences include centralisation, formalisation, hierarchical level, and span of control; job/work environment influences include job autonomy, skill variety, feedback, advancement opportunities, and interaction with others (co-workers and supervisors); personal influences include age, sex, Machiavellianism and self-monitoring (Ferris et al., 1989).

According to Ferris et al.'s (1989) model, a higher degree of centralisation in organisations promotes organisational politics because in such organisations power and control are concentrated at the top of the organisation so lower level workers have less control over their work, performance, and rewards. Therefore, lower level workers engage in political activities such as lobbying high-level managers to secure valued outcomes such as promotion and financial rewards. Drawing on the job characteristic model, Ferris et al. (2017) suggest that skill variety, autonomy, and feedback are expected to reduce political perceptions because employees' greater control and access to information reduces uncertainty, ambiguity, and their dependence on others.

A substantial body of conceptual and empirical research has found support for Ferris et al.'s (1989) model of organisational politics. For example, Ferris and

Kacmar (1992) found that job/work environment factors such as feedback, job autonomy, skill variety, and opportunity for promotion all have negative relationships with employees' perceptions of organisational politics. Aryee, Chen, and Budhwar (2004) found that workers' participation in organisational decision making (decentralisation) is negatively associated with their perceptions of organisational politics. O'Connor and Morrison (2001) found that employees' greater control over their jobs is negatively associated with perceptions of organisational politics. Similarly, Rosen, Levy, and Hall (2006) found that the work environment comprised of formal and informal feedback is negatively associated with perceptions of organisational politics. Yang, Treadway and Stepina, (2013) found that both role ambiguity and role conflict have significant positive association with employees' perceptions of organisational politics. They argue that the lack of clear organisational rules and role definitions is likely to enhance perceptions of politics since management has no established rules to explain the underlying reasons for organisational decisions (Yang et al., 2013).

Furthermore, Ferris et al. (2017) and Rosen, Ferris, Brown, Chen, and Yan (2014) suggest that perceptions of organisational politics thrive in work environments characterised by uncertainty and ambiguity because in such work environments employees are unsure of what behaviours will be rewarded. In other words, when employees perceive that there exist no clear rules, policies or procedures for organisational decisions, they engage in political behaviours such as developing personal ties with decision making authorities to secure a greater share of organisational resources which they may consider unachievable via legitimate means (Frieder, Ma, & Hochwarter, 2015).

Drawing on the job characteristics model (Hackman & Oldham, 1976) and uncertainty management theory (Van den Bos & Lind, 2002), it seems that HIWPs may have a negative relationship with employees' perceptions of organisational politics. For example, Lawler (1994) explains that HIWPs, as a management approach, draw on early research on management philosophies including job enrichment, job design, and organisation design. HIWPs emphasise the design of jobs in which employees have greater autonomy/power, feedback, and skill variety so they can feel their jobs as more meaningful (Wood & Wall, 2007). Lawler (1988) argues that HIWPs emphasise flat or decentralised organisational structures so employees have the opportunity to influence decisions of concern to them. In sum, while centralisation (as noted above) has been recognised as a major factor that promotes perceptions of politics, "moving decision-making power downward in organisations is what employee involvement is all about" (Lawler et al. 2001, p. 48).

Similarly, uncertainty management theory suggests that when information about an event or decision-making procedure is unavailable, people are uncertain about the outcomes (Van den Bos & Lind, 2002). However, since people have a fundamental need to be certain about their world or what matters to them, they try to seek information, particularly about the fairness of decision-making authorities, to predict future outcomes (Van den Bos & Lind, 2002). Taking uncertainty management theory into consideration, one can expect that provision of greater information, which is one of four key attributes of HIWPs, can reduce uncertainty, and thus perceptions of organisational politics, as Rosen et al. (2014) found that uncertainty is one of the major factor that fosters perceptions of politics. Prince, Katz, and Kabst (2011) note that "a key aspect of high-involvement organisation practices involves the sharing of information with lower-level, non-managerial

employees” (p. 2485). Similarly, Kizilos et al. (2013) argue that the information attribute of HIWPs not only updates employees about their organisational performance but also provides them timely feedback regarding their individual performance.

In summary, employees’ greater involvement in organisational decision making, performance-based rewards and incentives, opportunities for career development through gaining work-related skills and knowledge, access to information regarding organisational policies and practices, and feedback on individual performance, can reduce their perceptions of organisational politics. Such attributes of HIWPs may influence perceptions of politics through reducing uncertainty and ambiguity often present in the Taylorist form of work organisations where only the top management possess much of the information and decision-making power. Therefore, it is hypothesised that:

Hypotheses 7: HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be negatively related to Organisational Politics.

2.4 Organisational Justice, Employee Engagement, and Trust in Employer

The section below discusses the relationship between organisational justice and employee outcomes: employee engagement and trust in employer, respectively.

2.4.1 Organisational Justice and Employee Engagement

A still growing body of empirical research has demonstrated that when employees perceive that they have been treated fairly, they tend to show more positive workplace behaviours including satisfaction with pay (Folger & Konovsky, 1989; Till & Karren, 2011), intrinsic motivation (Zapata, Colquitt, Scott, &

Levingston, 2009), organisational citizenship behaviour (Moorman, 1991; Masterson, Lewis, Goldman, & Taylor, 2000), job satisfaction (Ambrose & Schminke, 2009), organisational commitment (Colquitt, Conlon, Wesson, Porter, & Ng, 2001), and job performance (Cohen-Charash & Spector, 2001). Adversely, low level of perceived justice has been found to predict turnover intentions (Nadiri and Tanova, 2010) work-induced insomnia (Greenberg, 2006), and stress (Cropanzano & Wright, 2011).

Often treated under the rubric of organisational justice, procedural, distributive, interpersonal and informational justice have also been found to have a positive association with employee engagement (e.g., Karatepe, 2011; He, Zhu, & Zheng, 2014; Lyu, 2016; Park, Song, & Lim, 2016). Further empirical evidence has also supported the fairness hypothesis that a high-level of perceived justice is associated with engagement, while low-level is associated with burnout (Moliner et al., 2008; Moliner, Martinez-Tur, Peiro, Ramos, & Cropanzano, 2013).

Researchers have invested a great deal of effort to understand why organisational justice is important to workers and why it has positive and enduring effects on their work behaviours. Organisational justice literature provides three main theoretical models to explain the psychological processes through which perceived justice influence employee behaviours: the instrumental model, the relational model, and the deontic model. The instrumental model (Leventhal, 1980; Thibaut & Walker, 1978) holds that employees care about organisational justice because it provides them long-term control over worthwhile organisational resources such as pay, rewards, and promotion, while injustice suggests the opposite (Cropanzano, Goldman, & Folger, 2003).

The relational models of justice comprise three theoretical models: the group value model, the relational model of authority, and the group engagement model (Blader & Tyler, 2015). According to relational models, justice is important to workers, not only because it provides them long-term control over desired outcomes, but also because it communicates to them the nature of their relationship with decision-making authorities (Tyler & Lind, 1992). Fairness in the workplace communicates to workers that they are valued members of an organisation, while unfairness communicates the opposite (Tyler & Blader, 2003).

Finally, the deontic model (Folger & Glerum, 2015; Cropanzano et al., 2003) posits that the instrumental and relational models of justice do not offer complete understanding of why employees care about organisational justice. According to the deontic model, employees care about organisational justice not only because it provides them long-term control over organisational resources, and communicates their social standing in the organisation, but also because it has value for its own sake (Cropanzano & Stein, 2009). Based on ethical standards or moral principles, advocates of deontic theory suggest that people care about justice because they feel a moral obligation or duty (deon) to uphold norms of justice (Cropanzano et al., 2017).

Drawing on the instrumental model, relational model, and deontic model of justice, a substantial body of research has established that justice is the fundamental requirement for organisational effectiveness and for the personal satisfaction of employees. Therefore, it comes as no surprise that Maslach, Schaufeli, and Leiter (2001), in their theory of engagement and burnout, also considered fairness or justice as factors necessary for engagement. They suggest that a high-level of perceived justice is expected to promote engagement, while a low-level of perceived justice is

expected to cause burnout (Maslach et al., 2001), a claim which has received empirical support (e.g., Maslach & Leiter, 2008; Moliner et al., 2008).

Equity theory (Adams, 1963, 1965) also helps to conceptualise a potential link between perceptions of organisational justice and employee engagement. According to equity theory, people's appraisal of equity or inequity is the balance or imbalance between their investments (efforts, experience, intelligence, and education) and outcomes (rewards and recognition). In this perspective, the lack of reciprocity or the imbalanced investments and outcomes leads to burnout, while balanced investment and outcomes leads to engagement (Maslach & Leiter, 2008). Burnout and engagement have often been viewed as opposite ends of the same continuum; in other words, engagement has been conceptualised as the positive antithesis of burnout (Maslach et al., 2001; Maslach & Leiter, 2008).

Although the JD – R framework (Bakker & Demerouti, 2007) remains the most dominant model predicting employee engagement, Saks (2017) notes that in addition to job demands and resources, organisational justice is one of the process variables necessary for employee engagement. Drawing on social exchange theory, Saks (2006) also suggests that when employees perceive fairness in the workplace they feel obliged to reciprocate with greater efforts to perform their job roles through work engagement. Drawing on the discussion above, and empirical evidence linking perceived organisational justice and employee engagement, it is hypothesised that:

Hypotheses 8: Organisational Justice [(a) Distributive, (b) Procedural, (c) Interpersonal, and (d) Informational] will be positively related to Employee Engagement.

2.4.2 Organisational Justice and Trust in Employer

Given the centrality of trust in social exchange relationships, it has often been included as a dependent variable of organisational justice (e.g., Colquitt & Rodell, 2011; Ambrose & Schminke, 2003) or the mediating variable in the relationship between organisational justice and work outcomes (e.g., Colquitt et al., 2012; Aryee, Budhwar, & Chen, 2002). In addition to these individual studies, meta-analytic reviews (Colquitt et al., 2013; Rupp, Shao, Jones, Liao, 2014) have also demonstrated that perceptions of organisational justice predict trust in both employer and supervisor.

Researchers have largely used social exchange theory (Blau, 1964), fairness heuristic theory (Lind, 2001), and uncertainty management theory (Van den Bos & Lind, 2002) to explain the theoretical link between organisational justice and trust. Blau (1964) defines social exchange as “voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others” (p. 91). Blau (1964) also emphasises the difference between economic exchange and social exchange in that an economic exchange comprises “formal contract that stipulates the exact quantities to be exchanged”, while social exchange entails “unspecified obligations” (p. 93). According to Blau (1964) “only social exchange tends to engender feelings of personal obligation, gratitude, and trust; purely economic exchange as such does not” (p. 94).

Blau (1964) also conceptualised the role of trust in social exchange relations and notes that: “Since there is no way to assure an appropriate return for a favour, social exchange requires trusting others to discharge their obligations” (p. 94). Using Blau’s (1964) notion of social exchange, justice scholars suggest that employees

consider fair treatment as an organisational initiative which motivates them to reciprocate with positive work attitudes such as trust (Colquitt & Rodell, 2011; Cropanzano & Mitchell, 2005). Similarly, Konovsky and Pugh (1994) suggest that fairness in organisations promotes trust in authorities because fair treatment communicates that an authority respects the rights and dignity of employees, thus reducing the vulnerability and risk associated with exchange relationships.

Fairness heuristic theory (Lind, 2001) proposes that employees in organisations often face a “fundamental social dilemma” – whether to trust and co-operate with authorities (p. 61). Co-operating with authorities and investing personal resources (e.g., time and energy) can lead to better outcomes; however, it also involves a risk of exploitation, rejection, and loss of self-identity (Van den Bos, Lind, & Wilke, 2001). Authorities may exploit employees by assigning additional work which will never be rewarded. To solve this problem, employees assess the trustworthiness of authorities by using fairness heuristics, or making cognitive shortcuts, to guide their behaviours (Lind, 2001). Since employees do not have complete information about the trustworthiness of authorities, particularly in their early career, they use procedural fairness as a heuristic (mental shortcut) to decide whether an authority can be trusted. However, in absence of procedural fairness information, employees assess the fairness of outcomes received as a heuristic to guide their subsequent work attitudes and behaviours (Proudfoot & Lind, 2015). In brief, fairness heuristic theory suggests that when employees perceive that decision-making authorities in an organisation adhere to some procedural, distributive, interpersonal, and informational justice rules, they behave in a more trusting and co-operating way (Colquitt & Rodell, 2011).

Uncertainty management theory (Lind & Van den Bos, 2002; Van den Bos & Lind, 2002) is an extension of fairness heuristic theory as it is derived from many propositions put forth by this theory (Proudfoot & Lind, 2015). However, uncertainty management mainly focuses on when and why fairness is important to people and provides new insights into the processes through which justice judgments are formed (Proudfoot & Lind, 2015). Also, while fairness heuristic theory addresses employees' concern regarding the trustworthiness of authorities and the possible danger of exploitation and exclusion from valued group, uncertainty management theory focuses on peoples' use of information to reduce uncertainty in a much more general sense (Bobocel & Gosse, 2015).

Uncertainty management theory asserts that people often face uncertainty in social and organisational contexts; in situations of uncertainty, high levels of perceived justice can reduce the effects of uncertainty or help to cope with uncertainty (Lind & Van den Bos, 2002). The theory further argues that the effects of justice perceptions on employees' attitudes and behaviours are stronger under conditions of high uncertainty compared to less uncertainty (Lind & Van den Bos, 2002). Although uncertainty management theory asserts that fairness helps people to cope with almost any kind of uncertainty in external business environments, "it might also help people cope with chronic uncertainty about the actions or trustworthiness of their supervisors and co-workers" (Lind & Van den Bos, 2002, p. 216).

Using social exchange theory, fairness heuristic theory, and uncertainty management theory, previous studies have provided empirical support for the link between perceptions of organisational justice and trust (e.g., Colquitt et al., 2012; Colquitt & Rodell, 2011; Aryee et al., 2002; Konovsky & Pugh, 1994). Further,

meta-analytic reviews (see Colquitt et al., 2001; Dirks & Ferrin, 2002; Colquitt et al., 2013; Rupp et al., 2014) have also demonstrated that perceived procedural, distributive, interpersonal, and informational justice are positively associated with trust. Consistent with prior research, and drawing on social exchange, fairness heuristic, and uncertainty management theory, it is hypothesised that:

Hypotheses 9: Organisational Justice [(a) Distributive, (b) Procedural, (c) Interpersonal, and (d) Informational] will be positively related to Trust in Employer.

2.5 Organisational Politics, Employee Engagement, and Trust in Employer

In the section below, first, the construct of organisational politics is discussed. Following this, the relationships between perceptions of organisational politics and both employee engagement and trust in employer are discussed.

2.5.1 Organisational Politics

Given the importance of fairness in exchange relationships between employees and employer, it comes as no surprise that organisational politics has received significant attention from organisational researchers and practitioners who are concerned with the quality of work-life. Although more recently scholars have begun to explore the positive side of organisational politics (e.g., Hochwarter, 2012; Kane-Frieder, Hochwarter, & Ferris, 2014; Landells & Albrecht, 2017), more than three decades of research has established the detrimental effects of political behaviour on both individuals and organisations (discussed below). Hall, Hochwarter, Ferris, and Bowen (2004) assert that “the dark side perspective” of organisational politics has not formed in a vacuum, rather, there are rational reasons for this perspective (p. 238).

Organisational politics refers to employees' perceptions about the extent to which the work environment is characterised by self-serving and illegitimate behaviours designed to protect or maximise self-interest, often at the cost of others and the organisation (Hochwarter, Ellen, & Ferris, 2014). Employees perceive that organisational politics is a bad, unfair, unhealthy, and self-serving behaviour practiced by organisational members to gain power and control over scarce organisational resources (Gandz & Murray, 1980).

A growing body of empirical evidence has demonstrated that perceptions of organisational politics are negatively associated with beneficial work attitudes and behaviours including job satisfaction (Hochwarter & Ferris, Laird, Treadway, & Gallagher, 2010; Abbas, Raja, Darr, Bouckennooghe, 2014; Cropanzano et al., 1997), job performance (Rosen & Hochwarter, 2014), organisational citizenship behaviour (De Clercq & Belausteguigoitia, 2017; Chang, Rosen, Siemieniec, & Johnson, 2012), organisational commitment (Rosen, Change, Johnson, & Levy, 2009), person-environment fit (Frieder et al., 2015), pay satisfaction (Yang et al., 2013; Harris, Harris, & Harvey, 2007), and employee morale (Rosen et al., 2006).

Empirical evidence has also shown that perceptions of organisational politics are positively associated with many undesired work-related outcomes such as turnover intentions (Byrne, 2005; Harris et al., 2007), job frustration (Harris, Harris, & Wheeler, 2009; Rosen, Harris & Kacmar, 2009), burnout (Vigoda-Gadet & Talmund, 2010; Huang, Chuang, & Lin, 2003), job-strain (Rosen & Levy, 2013), job stress (Vigoda-Gadot & Talmud, 2010), job anxiety (Ferris et al., 1996), psychological contract breach (Rosen & Levy, 2013), and depressed mood (Byrne, Kacmar, Stoner, & Hochwarter, 2005). In addition to these individual studies, three meta-analytic reviews have also confirmed the deleterious effects of perceptions of

organisational politics on employees and employer outcomes (see Miller, Rutherford, & Kolodinsky, 2008; Chang, Rosen, & Levy, 2009; Bedi & Schat, 2013).

2.5.2 Organisational Politics and Employee Engagement

Given the negative consequences of perceptions of organisational politics for both employee and employer, researchers have offered several conceptual as well as theoretical explanations for the links between organisational politics and outcomes. Drawing on Bakker and Demerouti's (2007) job demands and resources (JD-R) framework, Rich et al. (2010) maintain that organisational politics is one of the hindrance demands that makes employees believe that no reasonable amount of effort will be sufficient to achieve meaningful outcomes, therefore, when faced with highly political work environment, they withdraw their emotional, cognitive, and physical resources. In other words, an employee who perceives the work environment as highly political in nature has reason to believe that hard work will often not be rewarded.

Using the JD-R framework, Saks (2017) also identified several resources, demands and, process variables that drive engagement and suggested that organisational politics is a hindrance stressor-demand that impedes engagement. The distinction between types of demands that can either be challenge-stressors or hindrance-stressors is explained by Cavanaugh, Boswell, Roehling, and Boudreau (2000) who suggest that challenge-stressors (e.g., job overload, time pressure, and high levels of responsibility) are a type of stressor-demands that help employees to learn, grow, and achieve personal goals, thus "produce positive feelings, even though they may be stressful" (p. 66). While, hindrance-stressors (e.g., organisational politics, red tape, and concerns about job security) are likely to impede people from

achieving valued goals, and thus produce negative feeling (Cavanaugh et al., 2000). Similarly, LePine, Podsakoff, and LePine (2005) conducted a meta-analytic review about challenge and hindrance stressors in the workplace and found that organisational politics is a hindrance-stressor which has negative indirect effects on performance through job-strain.

In addition to the JD-R framework discussed above, Hobfoll's (1989, 2001) conservation of resources (COR) theory suggests that people actively strive to retain, protect, and acquire resources loosely defined as: *Objects* (e.g., material, shelter, and food), *conditions* (e.g., job tenure, seniority, and status), *personal characteristics* (skills, expertise, and self-efficacy), and *energies* (e.g., money and time). These resources help people to experience pleasure and achieve important goals in their personal and work-life. However, the value of these resources varies from person to person, such that time spent with family could be a resource for someone, while may not be for someone else (Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014).

The COR theory also suggests that it is psychologically more harmful for people to lose resources they have already gained rather to gain lost resources (Halbesleben et al., 2014). Resources can be defined as anything people value such as job, status, self-esteem, mastery, objects, money, basic beliefs, position, economic stability, and loved ones (Hobfoll, 1989). According to COR theory, stress occurs when these resources are threatened or lost, or when the return on investment of these resources is less than expected (Hobfoll, 1989).

Consistent with the assumptions of COR theory, previous studies suggest that organisational politics is not only a threat to employees' goals, but also a risk for

losing valued resources they have already obtained (Cropanzano et al., 1997). When employees perceive their work environment to be highly political in nature, they withhold their additional resources and engage in destructive, competing, and self-serving behaviours that are harmful for others and the organisation (Randall, Cropanzano, Bormann, & Birjulin, 1999). In other words, organisations are analogous to a marketplace where people exchange what they have with what they want (Cropanzano et al., 1997). In engagement, people invest their physical, emotional, and cognitive resources in the hope of getting something in return. When they perceive that the distribution of organisational resources is political in nature, they may withhold resources necessary for engagement.

In line with these theoretical arguments are the empirical findings from recent studies, which suggest that perceptions of organisational politics are negatively related to employee engagement (e.g., Kane-Frieder et al., 2014; Karatepe, 2013b; Agarwal, 2016). Similarly, empirical evidence also indicates that perceptions of organisational politics are positively related to burnout – the antithesis of engagement (Huang et al., 2003; Vigoda-Gadot & Talmund, 2010; Cropanzano et al., 1997). Consistent with prior research and theorising on organisational politics, it is hypothesised that:

Hypothesis 10a: Perceptions of Organisational Politics will be negatively related to Employee Engagement.

2.5.3 Organisational Politics and Trust in Employer

To conceptualise the nature of the relationship between organisational politics and trust in the employer, it is important to examine the historic theorising on why people trust – a question which has been salient in past research on trust. In

this regard, the most comprehensive and widely accepted theory of trust was offered by Mayer et al. (1995) who argue that people trust for two reasons: first, because of their dispositional tendencies to rely on the words and deeds of others, and second, others have demonstrated that they are trustworthy. Baer and Colquitt (2018) note, because of the limited ability of dispositional tendencies (also called trust propensity) in explaining why people trust, what makes people trustworthy has attracted a great deal of attention from trust scholars.

Mayer et al. (1995) suggest that the ability, benevolence, and integrity characteristics of the trustee signal the trustworthiness of the trustee. As Mayer and Davis (1999) note that the importance of these characteristics in developing trust varies from situation to situation, benevolence and integrity seems more relevant in the context of organisational politics. When employees perceive that the decision-making in their organisation is highly political, they may doubt the benevolence and integrity, thus having less trust in their employer. Benevolence refers to the trustee motives and intentions to care for the well-being of the trustor, aside from self-interest motivations (Mayer et al., 1995). The factors that signal to the trustor that the trustee is benevolent include openness, loyalty, concern, and perceived support (Colquitt, Scott, & LePine, 2007). While integrity refers to the trustor's perception that the trustee adheres to some moral principles acceptable to the trustor (Mayer et al., 1995). The factors that signal the integrity of the trustee include fairness, promise fulfilment, credibility (Colquitt et al., 2007), and honesty (Pirson & Malhotra, 2011).

Conventional wisdom suggests that perceptions of organisational politics may have a negative relationship with an employee's trust in employer. As Mayer and Davis (1999) point out, when employees perceive a discrepancy between policy and actual practices they question the integrity of their organisation. For example, it

is not sufficient to *say* that performance and rewards are linked but it has to be demonstrated. Cropanzano et al. (1997) note that in political organisations rewards are distributed based on power rather than merit, and rules may change frequently. Similarly, organisational politics can undermine the benevolence facet of the trustworthiness of an employer. Prior research suggests that perceived politics is a hindrance-stressor (Podsakoff, LePine, & Lepine, 2007; Saks, 2017) which prevents employees from achieving personal and professional goals (Chang et al., 2009). More specifically, when employees perceive that the decision-making in their organisation is based on favouritism rather than merit, they may perceive that their organisation is not benevolent towards them.

In addition to Mayer et al.'s (1995) theory of trust, uncertainty management theory (Van den Bos & Lind, 2002) also assists in conceptualising the relationship between organisational politics and trust. The theory holds that perceived fairness reduces the uncertainty or risk associated with employee-employer exchange relationships because fairness signals the organisation's trustworthiness (Van den Bos & Lind, 2002). Whereas, Andrews and Kacmar (2001) assert that political organisations are perceived to be unfair because, in such organisations, the distribution of resources is based on favouritism and self-interest.

Similarly, Hall et al. (2004) also suggest that a work environment perceived to be political is associated with uncertainty, ambiguity, and lack of transparency and, in such work environments, employees are unsure of which work behaviours will lead to desired outcomes. In an empirical study, Albrecht (2006) found a negative relationship between perceived politics and trust in an organisation and notes that it is the risk and uncertainty resulting from politicised organisational environments that damages trust between employees and their employer. It is

important to note that uncertainty and risk have been central to many definitions of trust. For example, Lewis and Weigert (1985) conceptualised trust as “the undertaking of a risky course of action on the confident expectation that all persons involved in the action will act competently and dutifully” (p. 971). Therefore, consistent with prior research, it is hypothesised that:

Hypothesis 10b: Perceptions of Organisational Politics will be negatively related to Trust in Employer.

2.6 The Indirect (mediated) Relationships

The hypotheses stated above predict that (a) HIWPs are positively associated with employee engagement and trust in employer, (b) HIWPs are positively associated with perceptions of organisational justice and negatively associated with perceptions of organisational politics, (c) perceptions of organisational justice are positively associated with employee engagement and trust in employer, while perceptions of organisational politics are negatively associated with employee engagement and trust in employer.

Together, these hypotheses form a mediation model (see Figure 1) which predicts that perceptions of organisational justice and organisational politics mediate the relationships between HIWPs and both employee engagement and trust in employer. The rationale for these mediated relationships is based on the premise that perceptions of organisational justice and politics are the most appropriate process variables which transmit the effects of HIWPs on employee attitudes and behaviours. This is consistent with theoretical and empirical literature discussed above which suggests that perceptions of organisational justice and organisational politics are critical process variables that can transmit the influence of work and employment

practices on both employee and employer outcomes. Harris et al. (2007) emphasise that perceptions of organisational justice and organisational politics are ubiquitous in organisations and their study cannot be ignored. Similarly, among others, Saks (2017) suggests that organisational justice and organisational politics are important process variables that transmit the influence of organisational practices on employee attitudes and behaviours such as engagement.

Accordingly, the mediation model depicted in Figure 1 shows the direct and indirect (mediated) relationships between HIWPs and employee outcomes (employee engagement and trust in employer) and offers following hypotheses.

Hypotheses 11: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Employee Engagement will be mediated by Distributive Justice.

Hypotheses 12: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Employee Engagement will be mediated by Procedural Justice.

Hypotheses 13: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Employee Engagement will be mediated by Interpersonal Justice.

Hypotheses 14: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Employee Engagement will be mediated by Informational Justice.

Hypotheses 15: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Employee Engagement will be mediated by Organisational Politics.

Hypotheses 16: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Trust in Employer will be mediated by Distributive Justice.

Hypotheses 17: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Trust in Employer will be mediated by Procedural Justice.

Hypotheses 18: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Trust in Employer will be mediated by Interpersonal Justice.

Hypotheses 19: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Trust in Employer will be mediated by Informational Justice.

Hypotheses 20: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Trust in Employer will be mediated by Organisational Politics.

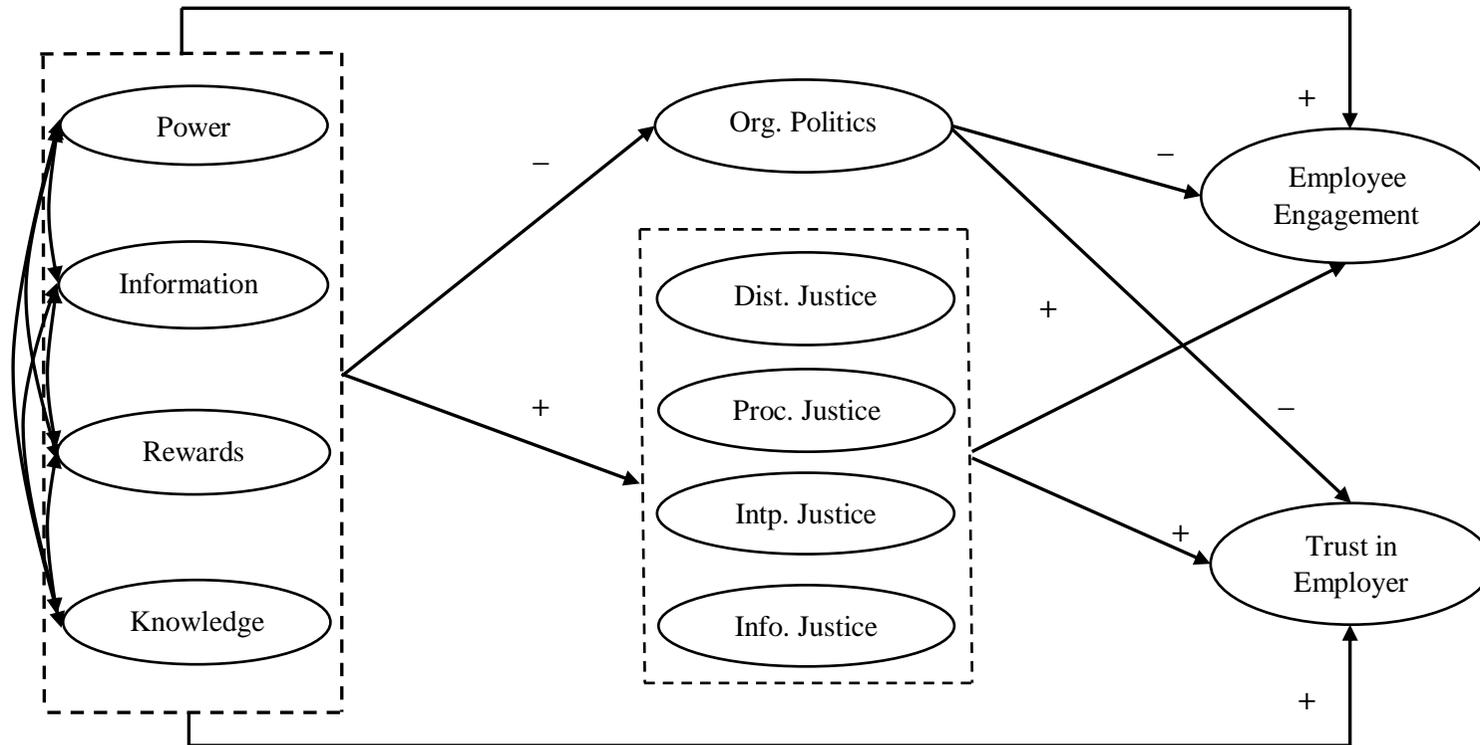


Figure 1. Hypothesised partial mediation model.

Note. Org = organisational; Dist = distributive; Proc = procedural; Intp = interpersonal; info = informational

CHAPTER 3: METHOD

3.1 Research Design

This study attempts to answer three key research questions. First, how do HIWPs influence employee and employer outcomes? Second, do HIWPs achieve the mutual gains perspective of HRM? Third, do changes in employees' experiences of HIWPs lead to changes in their work attitudes and behaviours?

To find answers to these research questions, twenty hypotheses were formulated. Together, these hypotheses formed a dynamic mediated model. Pitariu and Ployhart (2010) defined a dynamic relationship as “a longitudinal relationship between two variables” where both variables are measured repeatedly (p. 406). A dynamic mediated relationship is also defined as “the mediator and dependent variables, and frequently the independent variable, are measured repeatedly and have specific hypothesised causal sequences (Pitariu & Ployhart, 2010, p. 406).

Methodological researchers suggest that the most appropriate research design to test dynamic mediated relationships is a longitudinal research design (Maxwell et al., 2011; Ployhart & Vandenberg, 2010; Ployhart & MacKenzie, 2015; Maxwell & Cole, 2007). Researchers in the field argue that due to dynamic nature of relationships among constructs in organisational research, repeated measures designs provide a great merit to analyse change over time and draw causal inferences (Mitchell, 2001; Pitariu & Ployhart, 2010; Cole & Maxwell, 2003). Accordingly, in the context of this study, a longitudinal design with two-time periods was considered appropriate to test the dynamic mediated model (see Figure 1) proposed in this study.

A time lag of approximately six months was selected considering that it allows employees: (a) to have sufficient interactions with their supervisors and colleagues, (b) to experience the kind of decisions pertaining to justice events, (c) to experience involvement-oriented HR practices (HIWPs), and (d) to make informed choices about their work-related behaviours. Colquitt and Rodell (2011) note that prior longitudinal studies in organisational justice have used lags from six weeks to ten months. Similarly, in Wang et al.'s (2017) panel discussion, Vancouver suggests that a “longitudinal research is simply research where data are collected over *meaningful* span of time” (p. 3).

3.2 The Population, Sampling Method, and Participants

3.2.1 The Population of this Study

The population of this study was employees working in the banking sector in Pakistan. As in most developing countries, Pakistan has a Central Bank called the State Bank of Pakistan (SBP) which regulates and supervises all financial institutions operating in Pakistan (State Bank of Pakistan, 2016). The SBP classifies the banks in Pakistan into four groups: (1) public sector banks, (2) specialized banks, (3) domestic private banks, and (4) foreign banks (State Bank of Pakistan, 2015). Table 1 shows the number of banks and their branches in each category of bank operating in Pakistan (State Bank of Pakistan, 2015).

Table 1
Banks Types and their Number of Branches in Pakistan

	Types of Banks	Number of Banks	Branches
1.	Public sector banks	5	2,227
2.	Specialised banks	4	606
3.	Domestic private banks	22	9,450
4.	Foreign banks	4	10

For the purpose of this study, data were collected from domestic private banks in Pakistan. Public sector banks, specialised banks, and foreign banks were excluded from this study for several reasons. Public sector banks were excluded for two reasons. First, only one public sector bank, the National Bank of Pakistan, has branches throughout Pakistan, however, the other four banks belong to provincial government so they have branches only in their respective province. Second, the public-sector banks are there to serve the goals and objectives of the government of Pakistan, therefore, unfortunately, HRM practices in these banks are highly influenced by politicians and bureaucrats. Since the primary aim of this study was to examine the impact of HR practices on employees' perceptions of organisational politics and justice, it was perceived that the data from public-sector banks will contaminate the findings of this study as the approach to HRM in public sector and private sector organisations in Pakistan is completely different.

The four specialised banks were excluded from this study as they also are public-sector banks. The main purpose of these specialised banks is to provide long term and short term subsidised loans to farmers to develop and modernise the agriculture sector and to promote entrepreneurial activities in Pakistan. Finally, the foreign banks were excluded from this study because there are only 10 branches and few employees in Pakistan. They are located mainly in the capital city (Islamabad), and their purpose is to facilitate financial transactions between Pakistan and their home country. Therefore, the data for this study were collected only from the domestic private banks in Pakistan because the employment practices in this context are highly competitive, dynamic, and consistent with international banking standards (Di Patti & Hardi, 2005; Bharathi, 2010).

Moreover, Khilji (2004) notes that private-sector banks in Pakistan have adapted progressive HR practices such as employee involvement and participation in organisational decision making. Similarly, Khilji and Wang (2006) point out that, due to the impact of globalisation, the introduction of multinational banks in Pakistan, and pressures to develop competitive advantage, the HR practices of private-sector banks in Pakistan are very similar to those of banks operating in North America and other western countries. In addition, these private banks offer highly sophisticated financial products and services to their customers in Pakistan, similar to those offered by banks in developed countries. Thus, only the domestic private banks in Pakistan were selected as data from these banks will improve the generalisability of the findings of this study to other contexts.

3.2.2 Sampling Method

Considering the limited resources for this research (time and money), the goal was to select a representative sample of banks and their branches from a very large country. To achieve this goal, a multistage cluster design was considered appropriate as this design overcomes the problems of high sampling costs and the lack of a good sampling frame for a dispersed population of study (Cooper & Schindler, 2006; Neuman, 2014).

In the first step, the 14 largest domestic private banks (in terms of number of branches) were selected for this study. Any domestic private bank having more than 200 branches in Pakistan was included in the study. The 14 banks included in the study have branches in almost all major cities of Pakistan. Eight banks were excluded as they were too small and exist only in a few cities in Pakistan. Table 2 shows the banks selected for this study, their number of branches in Pakistan (State

Bank of Pakistan, 2015), the number of branches selected to distribute the survey, and the number of branches from which employees returned the survey questionnaire. Note that the first four banks shown in Table 2 are those banks that were previously public-sector banks, but which privatised in the early 1990's. Therefore, the number of branches is quite large compared to the other private banks.

Table 2
Number of Banks and Branches Included in the Present Study

Bank Name	Number of Branches in Pakistan	Number of Branches Surveyed	Number of Branches Participated
1. Habib Bank Limited	1663	40	38
2. United Bank Limited	1311	26	24
3. Muslim Commercial Bank	1247	32	30
4. Allied Bank Limited	1048	24	22
5. Bank Al Falah Limited	630	16	15
6. Meezan Bank Limited (IB)	551	16	15
7. Bank Al Habib Limited	420	16	16
8. Askari Bank Limited	391	16	12
9. Bank Islami Limited (IB)	317*	12	11
10. Faysal Bank Limited	281	12	10
11. Soneri Bank Limited	266	12	10
12. JS Bank Limited	243	12	10
13. Habib Metropolitan Bank Limited	237	12	11
14. Dubai Islamic Bank Limited (IB)	200	12	09
Total	8805	258	233

Note. IB = Islamic Bank; *Number of branches after merger of KASB and Bank Islami in 2016 (after merger the number of domestic private banks in Pakistan in 2016 was 21)

In the second step, the three largest metropolitan cities of Pakistan were selected: Lahore, Karachi, and Islamabad/Rawalpindi. The combined population of these three cities is approximately 50 million; nearly 25 percent of the total population of Pakistan. In the third step, each city was divided into clusters, and each cluster was different, to some extent, from other clusters. In other words, different geographical areas in each city were selected so that the sample would be

representative of the whole city. Table 3 shows the selected areas in each city where the data were collected.

Table 3
Division of Selected Cities into Possible Clusters by Area

City	Area/Cluster
Lahore	Inner City, Mall Road, Shadman, Model Town, Faisal Town, Johar Town, Allam Iqbal Town, Gulberg, Lahore Cantt, and Defence.
Karachi	Main Shahrah-e-Faisal, Saddar, Gulistan-e-Johar, Gulshan-e-Iqbal, Defence, Clifton, Pakistan Employees Cooperative Housing Society (PECHS), Malir, Korangi, Landhi, Sohrab Goth, Karachi Cantt, Al-Asif Square, Liaqatabad, Bahadurabad, and Tariq Road.
Islamabad/Rawalpindi	Aabpara Market, Jinnah Avenue, Blue Area, Markaz, Islamabad, Main Boulevard, Saddar, Rawalpindi Cantt, Raja Bazar, Satellite Town, and Faizabad.

Note. Islamabad and Rawalpindi are twin cities so people in Pakistan usually consider them as one city.

In the fourth step, a list of branch addresses for the banks was developed. The list of branch addresses was compiled using two sources. First, a manual of banks operating in Pakistan was downloaded from the official website of SBP (State Bank of Pakistan Publication, 2016). Second, since the manual was not very comprehensive, banks' websites were used to confirm and find the branch addresses in the selected areas. This exercise resulted in a list of 258 branches in Lahore, Karachi, and Islamabad/Rawalpindi (see Appendix A). Finally, all 258 branches of the 14 banks were physically visited to distribute and collect back the surveys.

3.2.3 Participants

The participants of this study were clerical and administrative employees such as cashiers, tellers, front desk employees, back office employees, and customer

service representatives from within the selected branches. Since the purpose of this study was to examine the impact of HIWPs on the attitudes and behaviours of non-managerial employees, employees holding managerial positions (e.g., branch managers) were not included in this study.

Wood and de Menezes (2011) point out that “even though managers are employees, they are more the instigators or bearers, rather than recipients of practices such as high involvement management” (p. 1600). Generally, employees see their supervisors or managers as management representatives who either take part in organisational decision-making or carry out organisational agenda. Therefore, to examine the impact of HIWPs on employee outcomes, the inclusion criteria for respondents in this study was that they be an employee holding a clerical/non-managerial position in a domestic private bank in Pakistan.

Since the Government of Pakistan does not classify private sector jobs, the Australia and New Zealand Standard Classification of Occupation (ANZSCO) was used to define the population of this study. According to ANZSCO, the banking sector employees considered for this study fall into the following category: Occupation code: 552111 – Bank Worker. Major tasks for these workers include greeting customers, answering customer inquiries about bank accounts, accepting cash and cheques, debiting customers’ accounts, opening and closing accounts for customers, balancing cash and advising supervisors of cash position, explaining and promoting bank services to customers, and referring them to appropriate financial services (ANZSCO, 2013).

In the first round of the survey, 2781 questionnaires were distributed to 258 branches of the selected banks. Of these, 1554 completed questionnaires were

received from 233 branches – the overall response rate was 55.87 percent. Table 4 shows the frequency distribution of bank wise survey and response rate.

Table 4
Frequency Distribution of Bank-wise Response Rate

Bank Name	Number of Surveys Distributed	Number of Surveys Received	% Response Rate
1. Habib Bank Limited	367	224	61.03
2. United Bank Limited	372	195	52.41
3. Muslim Commercial Bank Limited	392	227	57.90
4. Allied Bank Limited	242	137	56.61
5. Bank Al Falah Limited	162	101	62.34
6. Meezan Bank Limited (IB)	172	100	58.13
7. Bank Al Habib Limited	266	171	64.28
8. Askari Bank Limited	132	58	43.93
9. Bank Islami Limited (IB)	112	59	52.61
10. Faysal Bank Limited	107	51	47.66
11. Soneri Bank Limited	122	57	46.72
12. JS Bank Limited	103	52	50.48
13. Habib Metropolitan Bank Limited	129	73	56.58
14. Dubai Islamic Bank Limited (IB)	103	49	47.57
Total	2781	1554	55.87

Participants demographic analysis showed that 1201 respondents were male (77.3 percent) and 353 respondents were female (22.7). The ratio of male to female respondents in the current study is representative of the workforce in Pakistan where female employees account for only 25 percent of labour force (The World Bank, 2018). The mean age of the respondents at their last birthday was 36.56 years (SD = 5.08, n = 1522) and their average tenure with their current employer was 4.11 years (SD = 2.76, n = 1551). The tenure respondents had with their current employer ranged from 6 months to 18.05 years. Thirty-two respondents did not provide their age while 3 respondents did not provide their tenure. However, these surveys were also included in the analysis as the primary aim of this study was to examine the impact of HR practices on employee outcomes.

Of the 1554 completed questionnaires received, 36 (2.31%) had 79 missing values: a total of 0.05% missing values. The goal was, first, to identify whether the missing values were due to data entry errors or whether participants accidentally or deliberately missed questions. To this end, the hard copies of those 36 cases were reviewed. The review process indicated that there were no data entry errors as the same missing values were also found in the hard copies. Next, following Hair, Black, Babin, and Anderson's (2016, p. 47) guidelines, a diagnostic test to ascertain whether the missing data were "missing completely at random" (MCAR) was conducted using SPSS functionality.

Little's (1988) chi-square test statistics ($\chi^2 = 3068.39$, $df = 3312$, $p < .99$) showed that the missing data were MCAR. Hair et al. (2016) maintain that, when the missing data are MCAR, they will not bias subsequent data analysis. In this case the researcher can choose from a variety of imputation methods. In the current study, the missing values were replaced using SPSS function "series mean" also called "mean substitution method", which is replacing a missing value with the overall sample mean for that particular variable (Kline, 2011, p. 58). One problem in replacing missing values using series mean approach, is that it suppresses both the standard deviation and the standard error, however, if the data is large and the missing values are small (as in the current study) then it will not be a serious concern (Field, 2018). In the present data, a maximum of 6 missing values for one variable were identified which accounted for only 0.38 percent ($n=1554$). Therefore, using any method to replace missing values was seen as equally affecting or not affecting the findings (Field, 2018).

The city-wide response rate showed that, out of 1554 respondents, 619 were from Lahore (39.83 percent), 523 were from Karachi (33.65 percent), and 412 were

from Islamabad/Rawalpindi (26.51 percent). Table 5 shows bank and city-wide the number of completed surveys received.

Table 5
Frequency Distribution of Bank Wise Survey in Each City

Bank	City			Total
	Lahore	Karachi	IBD/RWP	
1. Habib Bank Limited	78	75	71	224
2. United Bank Limited	65	75	55	195
3. Muslim Commercial Bank	98	88	41	227
4. Allied Bank Limited	56	49	32	137
5. Bank Al Falah Limited	41	35	25	101
6. Meezan Bank Limited	39	23	38	100
7. Bank Al Habib Limited	79	52	40	171
8. Askari Bank Limited	24	19	15	58
9. Bank Islami Limited	27	21	11	59
10. Faysal Bank Limited	19	16	16	51
11. Soneri Bank Limited	23	20	14	57
12. JS Bank Limited	22	16	14	52
13. Habib Metropolitan Bank	30	22	21	73
14. Dubai Islamic Bank	18	12	19	49
Total	619	523	412	1554

Note. IBD = Islamabad; RWP = Rawalpindi

3.3 Procedure

The data were collected by delivering paper and pencil based self-administered questionnaires, in person, to banking employees. The self-completion questionnaires were administered in English. English is the official language of correspondence in all private and public-sector organisations in Pakistan (Raja & Johns, 2010; Bouckenooghe, Zafar, & Raja, 2015). All employees in clerical and administrative jobs in the banking sector in Pakistan are required to have at least a bachelor's degree from a recognised University. Pakistani Universities also use

English for all teaching. Therefore, there was no need to translate the survey into Urdu which is the national language of Pakistan. This approach was in line with other studies conducted in Pakistan (e.g., Khan, Quratulain, & Crawshaw, 2013; Donia, Johns, & Raja, 2016; Murtaza et al., 2014).

The self-administered questionnaire (see Appendix C) and the participant information sheet (see Appendix D) were distributed to employees in sealed envelopes. The questionnaires were distributed and collected by physically visiting the 258 selected branches during business hours. To ensure visits to all selected banks branches within the planned time, approximately six weeks, a detailed schedule was made. Using the location proximity, banks branches were distributed between me and my two friends/ex-colleagues who helped me in data collection. The completed questionnaires were collected back from employees one week after the first contact.

Since neither the state bank of Pakistan nor the banks' websites provide any contact information for employees, personally visiting the banks was the most effective way to collect the data. This procedure was also seen as positively affecting the response rate. It was perceived that potential participants may consider the efforts made to reach them physically rather than sending the survey through an email or by post. This approach has also been used in previous studies conducted in Pakistan (e.g., Bouckenooghe et al., 2015; Donia et al., 2016; Hameed, Roques, & Arain, 2013).

Furthermore, to ensure participants' confidentiality and privacy, neither branch managers nor HR managers of the respective banks were asked to distribute or collect back the questionnaires from employees. Approval from the Auckland

University of Technology Ethics Committee (AUTEC) was obtained to collect data using the procedure mentioned above (see Appendix B). The confidentiality agreement forms of ex-colleagues/friends were also submitted to AUTEC.

3.4 Analytical Procedure

Byrne (2010) points out that the SEM model can be decomposed into two sub models: (a) the measurement model and (b) the structural model. The measurement model defines relations between the observed (indicator) and unobserved (latent) variables, whereas the structural (regression) model defines relations among the unobserved variables (Byrne, 2010). This implies that the structural portion of a full structural equation model involves relations among only latent variables. However, Byrne (2010) points out that because the primary concern in working with SEM is to assess the extent to which relations between latent variables are valid, before examining the structural portion of a SEM model, it is critical to assess the validity of the measurement model.

The two basic statistical procedures frequently used to test the validity of measurement models include: (a) the exploratory factor analysis (EFA), and (b) the confirmatory factor analysis (CFA). EFA is designed for situations where the links between observed and latent variables are unknown, whereas CFA is designed for situations where the researcher has some knowledge or theoretical justification regarding the underlying latent structure (Byrne, 2010). Since all the measurement instruments used in this study have been validated and have been used frequently in past studies, confirmatory, rather than exploratory, factor analysis for each construct and for the final measurement model were conducted.

3.5 Model Evaluation Criteria

The most popular way to assess the fit of both the measurement model and the structural model to the sample data is by using the maximum likelihood-based chi square (χ^2) statistic and adjunct goodness-of-fit indices (Hu & Bentler, 1999). The chi square test offers a dichotomous decision rule to assess the fit of the hypothesised model, while goodness-of-fit indices quantify the degree of fit along a continuum (Hu & Bentler, 1998). The goodness-of-fit indices can be classified into three categories: (a) absolute fit indices, (b) incremental fit indices also known as comparative fit indices, and (c) parsimony fit indices (Kline, 2011, p. 196; Hair et al., 2016).

The absolute goodness-of-fit indices assess how well the hypothesised model reproduces the sample data without comparing it with any other model (Hu & Bentler, 1999). However, the incremental or comparative fit indices assess the amount of improvement in fit by comparing it with more restricted baseline models in which all the indicator variables are uncorrelated (Hu & Bentler, 1999). The parsimony fit indices (PFI) favour simple models. Within the calculation of the PFI, needlessly complex models (with a large number of estimated parameters) are penalised (Kline, 2011, p. 196).

As noted above, goodness-of-fit indices from each category discussed above assess the fit of the hypothesised model from a different perspective, therefore, this study used a combination of seven goodness-of-fit indices from all three categories to assess how well the hypothesised model represents the data. The following section briefly reviews these seven goodness-of-fit indices, provides rationale for their use in the present study, and evaluates the recommended cut-off values.

3.5.1 Absolute Fit Indices

This study used three absolute fit indices to examine the fit of both the hypothesised measurement model and the structural model; discussed below.

3.5.1.1 Chi Square Statistic. The first absolute fit index used to assess model fit in the present study was the maximum likelihood chi square test. The chi square (χ^2) goodness-of-fit statistic assesses the degree of discrepancy between the sample and fitted covariance matrices (Hu & Bentler, 1999). In other words, the χ^2 statistic determines the acceptance or rejection of null hypothesis, $\Sigma = \Sigma(\theta)$ (Bentler, 1990). In this equation, sigma (Σ) is the population covariation matrix, whereas theta (θ) is a vector of model parameters. In the structural equation modelling, the null hypothesis (H_0) postulates that the specification of the factor loadings, factor variances and covariances, and error variances for the model are same as in the population (Byrne, 2010, p. 70). The χ^2 test statistic for model fit ranges from zero to infinity, where zero indicating a perfect fit, whereas larger values indicating a poor fit (Mulaik et al., 1989). In addition to this, to establish that the null hypothesis is true (i.e., the model fits perfectly in the population), the value of χ^2 test should be non-significant (Bentler & Bonett, 1980).

While χ^2 test enjoys its popularity as a conventional fit statistic, it has some limitations. First, since χ^2 test is a direct function of sample size, the probability of rejecting any model increases as the sample size increases, even when the model describes the data very well (Bentler & Bonett, 1980). Similarly, Kline (2011, p. 201) also states that in large samples the χ^2 test of model fit is often failed even when the discrepancy between observed and expected covariances is small. Second, the χ^2 test assumes multivariate normality, which is often not the case, therefore, in case of multivariate non-normality the value of χ^2 increases and the associated model fit can

appear worse than it is (Kline, 2011, p. 201). Third, in some cases, the value of χ^2 increases as the number of observed variables increases, making the model fit more difficult (Hair et al., 2016, p. 578).

In order to address these χ^2 limitations, researchers have developed alternate measures of fit. Byrne (2010, p. 77) notes that Wheaton, Muthén, Alwin, and Summers (1977) were probably the first to address the limitations of χ^2 , developing a fit statistic known as the χ^2 /degrees of freedom (df) ratio. Wheaton et al. (1977, p. 99) suggest that since χ^2 statistic frequently appears significant in large samples, allowing rejection of the hypothesised model, χ^2 /df ratios provide a better indication of model fit. Although, Wheaton et al. (1977) suggest a χ^2 /df ratio of around 5.0 as reasonable, there is no consensus among researchers regarding an acceptable ratio for this statistic. Marsh and Hocevar (1985, p. 567) note that researchers have recommended χ^2 /df ratio as low as 2 or as high as 5 to indicate a reasonable fit.

3.5.1.2 Root Mean Square Error of Approximation. The second absolute fit index used to assess model fit in the present study was Root Mean Square Error of Approximation (RMSEA). Byrne (2010, p. 80) notes that researchers have recently recognised RMSEA as one of the most informative criteria in structural equation modelling. The RMSEA values determine how well the hypothesised model, with unknown parameters, fits the population covariance matrix if it were known (Browne & Cudeck, 1993, as cited in Byrne, 2010, p. 80). The RMSEA test statistic corrects for the tendency of χ^2 test to reject models with a large sample and a large number of observed variables (Hair et al., 2016, p. 579).

Moreover, MacCallum and Austin (2000, p. 219) also emphasise that researchers should frequently use RMSEA to assess model fit for at least three

reasons: (a) it is adequately sensitive to model misspecification, (b) it assists in drawing conclusions about model quality, and (c) it provides confidence intervals which indicate the degree of precision of the estimate of fit. A wide confidence interval would suggest a poor fit of the model to the data whereas a narrow confidence interval would suggest a good fit (MacCallum, Browne, & Sugawara, 1996).

MacCallum et al. (1996) note that some researchers have independently (without empirical support) arrived at a conclusion that the RMSEA value of .05 indicates a close fit (with a smaller value indicating a better fit). However, they suggest that RMSEA values in the range of .08 to .10 indicate mediocre fit (MacCallum et al., 1996). Similarly, Hu and Bentler (1999) have revised the conventional cut-off values criteria for several fit indices and suggest that RMSEA value of .06 indicates a good fit.

3.5.1.3 Standardised Root Mean Square Residual. The third absolute fit index used to assess model fit in the present study was Standardised Root Mean Square Residual (SRMR). The SRMR represents the average value across all standardised residuals (Byrne, 2010, p. 77). In other words, SRMR is a measure of the mean absolute correlation residual, which is the overall difference between the observed and predicted correlations (Kline, 2011, p. 209). As the SRMR statistic is related to correlation residual, it is highly sensitive to misspecified factor covariances in confirmatory factor analysis when testing measurement models (Kline, 2011, p. 208).

Hu and Bentler (1998) have examined the performance of various fit indices and pointed out that SRMR fit index is more sensitive in detecting complex

misspecified models than simple misspecified models. Complex misspecified models reflect measurement models with misspecified factor loadings, whereas simple misspecified models reflect structural models with misspecified factor covariances or a misspecified covariance between two factors (Hu & Bentler, 1998, p. 442).

The SRMR statistic values range from zero to 1.0, with values close to zero indicating a perfect fit. Researchers have suggested a value of .05 as indicating a good fit (Byrne, 2010), however, Hu and Bentler (1999) suggest that values close to .08 for SRMR are deemed acceptable. It is worth noting also that the AMOS default output only shows the unstandardized root mean square residual (RMR) value, however, the standardised RMR value can be obtained using the AMOS plugins function.

3.5.2 Incremental/Comparative Fit Indices

In addition to the above absolute fit indices, three incremental or comparative goodness-of-fit indices were also used to evaluate the model fit. The three incremental fit indices used in the present study are: Comparative Fit Index (CFI), Incremental Fit Index (IFI), and Tucker-Lewis Index (TLI).

3.5.2.1 Comparative Fit Index. The first incremental fit index used here was Bentler's (1990) Comparative Fit Index (CFI). Bentler and Bonett's (1980) Normed Fit Index (NFI) was the original incremental fit index which is "a ratio of the difference in the χ^2 value for the fitted model and the null model divided by the χ^2 value for the null model" (Hair et al., 2016, p. 580). The NFI has been the criterion of choice for model fitting, however, it tends to underestimate models in small samples (Byrne, 2010, p. 78).

To address this issue associated with normed fit indices, Bentler (1990) proposed the Comparative Fit Index (CFI) which avoids the problem of small samples. The CFI evaluates the relative improvement in the model under study over that of baseline models, normally the independence model (Kline, 2011, p. 208). More specifically, the CFI assumes that the latent variables in the null/independence model are uncorrelated, and it compares the sample covariance matrix with this model. Bentler (1990) therefore recommends that the CFI should be the index of choice in assessing the fit of the model to the sample data.

3.5.2.2 Incremental Fit Index. The second incremental fit index used in the present study was Bollen's (1989) Incremental Fit Index (IFI). Bollen (1989) asserts that the IFI adjusts for the two problems associated with Bentler and Bonett's (1980) normed fit index (NFI). First, the mean of the sampling distribution of the NFI is positively related to sample size thus giving an overly pessimistic image of model fit for small samples. Second, since the NFI does not adjust for degrees of freedom thereby leading to systematic bias against more parsimonious models, as models with more parameters frequently have higher NFI values (Bollen 1989). He recommends that researchers should calculate IFI along with other fit indices as it has desirable features such as it stays stable in different sample sizes (Bollen 1989).

3.5.2.3 Tucker-Lewis Fit Index. The third incremental fit index used in the present study was the Tucker-Lewis Index (TLI) also known as the Non-Normed Fit Index (NNFI) (Kenny & McCoach, 2003). The TLI is similar to NFI, however it is not normed, as its' values can fall below zero or above 1.0 (Hair et al., 2016, p. 580). The TLI is the most sensitive index to models with misspecified factor loadings (Hu & Bentler, 1999), and it also incorporates a penalty for model complexity (Marsh & Balla, 1994). Hu and Bentler (1998) examined the performance of various fit indices

and proposed a two-index presentation strategy. They recommend that researchers should use maximum likelihood based SRMR and supplement this with TLI, CFI, or RMSEA (Hu & Bentler, 1998, p. 447).

In summary, three fit indices (CFI, IFI, and TLI) discussed in this section are related to one another and reported in AMOS output under the heading of baseline comparisons. Their values range from 0.00 to 1.00, with values close to 1 indicating a good fit (Byrne, 2010, p. 79). Traditionally, values close to .90 for CFI, IFI, and TLI were considered as indicating a good fit, however, more recently, Hu and Bentler (1999) have suggested that cutoff values close to .95 for these fit indices are better in allowing a researcher to conclude that there is relatively a good fit between the hypothesised model and the sample data.

3.5.3 Parsimony Fit Indices

This study used the parsimony comparative fit index (PCFI) to compare the parsimony of alternative measurement and structural models which is discussed below.

3.5.3.1 Parsimony Comparative Fit Index. Mulaik et al. (1989, p. 444) argue that one can get goodness-of-fit indices values close to 1.0 by estimating as many parameters in the model as there are independent elements in the model, however, such models explain nothing. They suggested that one way to compensate for high goodness-of-fit indices values obtained at the expense of loss of degrees of freedom is to multiply them by parsimony ratio (i.e., the ratio of degrees of freedom used by a model to the total degrees of freedom available) (Mulaik et al., 1989). This calculation will result in new fit indices known as parsimony comparative fit indices. The presumed value of parsimony fit indices is that they combine both the

information about goodness-of-fit and the information about parsimony into a single index and they impose a penalty when an artificial goodness-of-fit is obtained by estimating more parameters (Mulaik et al., 1989).

The frequently used parsimony fit indices include the Parsimony Goodness-of-fit index (PGFI), the Parsimony Normed Fit Index (PNFI), and the Parsimony Comparative Fit Index (PCFI). Consistent with Bentler's (1990) recommendations that CFI should be the index of choice, PCFI was used to assess model parsimony. Contrary to other fit indices, no threshold values for parsimony fit indices have been recommended, however, Carlson and Mulaik (1993) suggest that values in the range of .80 indicate a good fit of the model to the data.

Concluding this section, a combination of maximum likelihood-based chi-square statistic and adjunct goodness-of-fit indices were used to assess the fit of both the measurement model and the structural model in the present study. Since the chi-square statistic is sensitive to sample size, particularly to large samples, other fit indices are frequently used as adjuncts to chi-square statistic to assess the quality of a model (Bentler, 1990; Marsh & Balla, 1994; Kenny, Kaniskan, & McCoach, 2015). Since each fit index is sensitive to some aspects of model misspecification, researchers suggest the use of more than one index to evaluate the fit of the model to data (Byrne, 2010, Hu & Bentler, 1999; Hair et al., 2016). Consistent with previous research, this study used the most frequently reported fit indices in the literature and the most stringent cutoff criteria recommend by researchers to evaluate and compare the model fit. Table 6 summarises the cutoff values used in the present study to evaluate the goodness-of-fit of the measurement model and the structural model.

Table 6
Cut-off Values Criteria for Goodness-of-Fit Statistics

	Fit statistics	Cut-off Values	Source
1.	χ^2 / degrees of freedom ratio	2 – 5	Wheaton et al. (1977) Marsh and Hocevar (1985)
2.	RMSEA	≤ 0.06	Hu and Bentler (1999)
3.	SRMR	≤ 0.05	Hu and Bentler (1999)
4.	IFI	≥ 0.95	Hu and Bentler (1999)
5.	CFI	≥ 0.95	Hu and Bentler (1999)
6.	TLI	≥ 0.95	Hu and Bentler (1999)
7.	PCFI	≥ 0.80	Carlson and Mulaik (1993)

3.6 Variables' Definitions, Measures, and CFAs

The definitions and the measures of the variables used in the present study are outlined below. Five main variables were used in this study: (1) HIWPs, (2) organisational justice, (3) organisational politics, (4) trust in employer, and (5) employee engagement. HIWPs comprised four mutually reinforcing but distinct factors – power, information, rewards, and knowledge. Similarly, organisational justice comprised four distinct factors – distributive, procedural, interpersonal, and informational justice. The data were collected using established measures from previous studies. Participants completed a self-administered questionnaire that consisted of 89 items (excluding demographic questions).

3.6.1 The Independent Variable – HIWPs.

As with other constructs, measuring HIWPs requires an understanding of the definition of this construct. Construct validity refers to the correspondence between a definition and its' measure (Schwab, 2005, p. 16). In this study HIWPs were defined in terms of four mutually reinforcing attributes: power, information, rewards, and knowledge (Lawler, 1986). Power refers to the extent to which employees perceive

that they have opportunities to participate in organisational decision making and have control over their work. Information refers to the extent to which employees perceive that they are informed of organisational policies and procedures. Rewards refer to the extent to which employees perceive that pay, promotion, and recognition are tied to performance. And finally, knowledge refers to the extent to which employees perceive that they have opportunities to receive work-related training. Scholars in this area suggest that, for effective employee involvement, these four attributes should not be considered in isolation; rather, as a collective set of mutually reinforcing attributes (Vandenberg et al., 1999; Riordan et al., 2005; Boxall & Macky, 2009).

Following Lawler's (1986) notion of HIWPs, Vandenberg et al. (1999) developed a 32-item scale to measure the employees' perceptions of the PIRK variables: Power (P), Information (I), Reward (R), and Knowledge (K). This study, like many other studies in the area (e.g., Boxall & Macky, 2014; Boxall, et al., 2015; Kizilos et al., 2013; Butts et al., 2009), used Vandenberg et al.'s (1999) 32-item scale to measure employees' experiences of PIRK variables. Power was measured using 7-items. Information was measured using 10-items. Reward was measured using 7-items. And finally, knowledge was measured using 8-items. All items measuring the PIRK variables were anchored on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Three CFA models of HIWPs were examined in the current study. Because, as above, the four attributes of a HIWP can be considered to be part of a single construct, in model one, they were operationalised as a second-order latent variable comprising the four first-order latent factors: power, information, rewards, and knowledge. Following the CFA procedure, first, each observed (indicator) variable

was set to have a nonzero loading on the first-order factor it was designed to measure, and zero loadings on the other three first-order factors. Second, error terms associated with each item were uncorrelated. Justification for CFA procedures for HIWPs as a second-order latent variable is based on evidence provided by Vandenberg et al. (1999), and other empirical studies (e.g., Kizilos et al., 2013; Butts et al., 2009).

The goodness-of-fit statistics related to this model indicated that the model moderately fits the data ($\chi^2 = 4421.13$; $df = 460$, $p = .000$; χ^2/df ratio = 9.61; IFI = .90; TLI = .89; CFI = .90; PCFI = .84; SRMR = .04; and RMSEA = .07). Here the chi square/degrees of freedom ratio (9.61) is higher than the cutoff values (i.e. 2 – 5) and the IFI, TLI, CFI values were borderline, since Hu and Bentler (1999) recommend that a value of .95 indicates a good fit.

In model two, HIWPs were operationalised as four first-order factors correlated with each other. Justification for the first-order CFA model of HIWPs is based on empirical studies such as Boxall et al. (2015) and Boxall and Macky (2014). Following the CFA procedure, the unidirectional arrows pointing from the second-order latent variable (HIWPs) to the four first-order variables (PIRK) were removed from the CFA diagram. All items were loaded onto their respective first-order factor: power, information, reward, and knowledge. Each item had a nonzero loading on the factor it was designed to measure, and zero loadings on all other factors. The four first-order PIRK variables were correlated, however, error terms associated with each measurement item were not correlated. The goodness-of-fit statistics for this model revealed that this model fits the data slightly better than the first model tested ($\chi^2 = 4291.55$; $df = 458$, $p = .000$; χ^2/df ratio = 9.37.48; SRMR = .03; IFI = .91; TLI = .90; CFI = .91; PCFI = .84; and RMSEA = .07).

In the third model all 32 items were loaded onto a single HIWPs latent variable. The four first-order factors (PIRK variables) were removed from the model, and one latent variable (HIWP) was drawn in the model. Error terms associated with each observed variable were uncorrelated. The goodness-of-fit statistics related to this model indicated the worst fit for the three to the sample data ($\chi^2 = 14145.52$; $df = 464$, $p = .000$; χ^2/df ratio = 30.48; SRMR = .08; IFI = .67; TLI = .65; CFI = .67; PCFI = .63; and RMSEA = .13).

The goodness-of-fit statistics related to the three CFAs models of HIWPs tested above revealed that HIWPs can be conceptualised as either a first-order, four-factor structure or a second-order latent variable comprised of four first-order factors. Byrne (2010, p. 143) suggests that whether a measurement instrument should be modelled as a first-order or as a second-order rests on meaningfulness, dictated by underlying theory.

Consistent with previous studies that HIWPs are comprised of four first-order latent variables. The goodness-of-fit statistics indicate that the four first-order latent variables model of HIWPs fits the data better than the second-order latent variable model ($\Delta\chi^2 = 130$, $DF = 2$). Second, it was assumed that modelling HIWPs as a four first-order factors will reveal more insights regarding which factor(s) have a greater impact on employee outcomes. Therefore, the first-order CFA model of HIWPs was retained. However, since the fit indices of first-order four factor model were not meeting the cut off criteria used in the present study, this model was further improved by following the post hoc model fitting procedures discussed below.

To detect misfitting parameters in the first-order four factor model of HIWPs, modification indices were reviewed. As modification indices (MIs) can be

conceptualised as a chi square statistic with one degree of freedom, an MI value represents the expected drop in the chi square value if the parameters were to be freely estimated (Byrne, 2010, p. 86). Associated with MIs column is the column labelled as “Par Change” – a statistic that represents the predicted estimated change for each fixed parameter in the model and provides a very useful information regarding the fit of each re-parametrisation of the model (Byrne, 2010, p. 86).

An analysis of MIs related to this CFA model revealed that there was a high level of overlap in items content. This redundancy occurs when the two items ask the same question, though worded differently (Byrne, 2010, p. 110). Hair et al. (2016, p. 607) suggest that because within-construct or between-construct error covariance among some error terms is a serious threat to the construct validity and their impact on the structural model, one of the two items with substantial content overlap should be deleted from the measurement model. Similarly, Gerbing and Anderson (1984) argue that the use of correlated measurement errors in the measurement model improves fit, however, it does so at the cost of meaning and substantive conclusions which can be drawn from the model.

Following Hair et al.’s (2016; Gerbing & Anderson, 1994) suggestions, items with substantial content overlap were deleted from the model. Modification indices related to Item 2 and 3 (MI = 128.65), and item 5 and 7 (MI = 129.09) of the “Reward” factor of HIWPs revealed a high level of content overlap.

The wording of items 2 and 3 of the reward factor is as follows:

Item 2: *There is a strong link between how well I perform my job and the likelihood of my receiving recognition and praise.*

Item 3: *There is a strong link between how well I perform my job and the likelihood of my receiving a raise in pay/salary.*

The wording of items 5 and 7 of the reward factor is as follows:

Item 5: *Generally, I feel this company rewards employees who make an extra effort.*

Item 7: *If I perform my job well, I am likely to be promoted.*

Although there exists a subtle difference in the exact meanings of the items in each pair, the underlying meaning is the same, and because the MIs values related to each pair of items indicates a high degree of content overlap, items 2 and 7 of the “Reward” factor of HIWPs were deleted.

Similarly, post hoc analysis or specification search also revealed a content overlap between items 1 and 2 (MI = 491.80), 3 and 4 (MI = 181.81), and 5 and 6 (MI = 211.50) of the “Knowledge” factor of HIWPs.

The wording of items 1 and 2 of the knowledge factor is as follows:

Item 1: *I am given a real opportunity to improve my skills at this company through education and training programs.*

Item 2: *I have had sufficient job-related training.*

The wording of items 3 and 4 of the knowledge factor is as follows:

Item 3: *My supervisor helped me acquire additional job-related training when I have needed it.*

Item 4: *I receive ongoing training, which enables me to do my job better.*

The wording of items 5 and 8 of the knowledge is as follows:

Item 5: I am satisfied with the number of training and development programs available to me.

Item 6: I am satisfied with the quality of training and development programs available to me.

Although questions in each pair stated above may not essentially be asking the same thing, they were pertaining to employees' satisfaction from the number and quality of training opportunities available to them. Considering the high level of content overlap indicated by MIs, items 1, 3, and 5 of the "Knowledge" factor of HIWPs were also deleted.

In addition, an analysis of MIs related to the "Information" factor of the HIWPs measurement instrument revealed that items 1 and 2 (MI = 545.90), 2 and 3 (MI = 149.14, 3 and 4 (MI = 108.81, 4 and 5 (MI = 92.77), 5 and 6 (MI = 179.52) and 6 and 7 (MI = 123.98) had a high degree of content overlap. This factor had 10 items, so it was somewhat predictable that the issue of content overlap would arise between some items.

The wording of items 1 and 2 of the information factor is as follows:

Item 1: Company policies and procedures are clearly communicated to employees.

Item 2: Management gives sufficient notice to employees prior to making changes in policies and procedures.

The wording of items 2 and 3 of the information factor is as follows:

Item 2: As stated above

Item 3: Most of the time I receive sufficient notice of changes that affect my work group.

The wording of items 3 and 4 of the information factor is as follows:

Item 3: *As stated above.*

Item 4: *Management takes time to explain to employees the reasoning behind critical decisions that are made.*

The wording of items 4 and 5 of the information factor is as follows:

Item 4: *As stated above.*

Item 5: *Management is adequately informed of the important issues in my department.*

The wording of items 5 and 6 of the information factor is as follows:

Item 5: *As stated above*

Item 6: *Management makes a sufficient effort to get the opinion and feelings of people who work here.*

The wording of items 6 and 7 of the information factor is as follows:

Item 6: *As stated above*

Item 7: *Management tends to stay informed of employee needs.*

The wording of items in each pair stated above were demonstrate a moderate level of content overlap between items. Therefore, in order to improve model fit, and to ensure that the measurement model is free from systematic error, items 2, 3, 5, and 6 were deleted from the information factor of HIWPs.

After deleting these 9 items from the HIWPs scale (4 information items, 2 reward items, and 3 knowledge items), the final measurement instrument of HIWPs comprised 23 items (power = 7 items, information 6 items, reward = 5 items, and

knowledge = 5 items). Because the HIWPs scale comprised a large number of items, researchers in the past have also used a limited number of items. For example, Kizilos et al. (2013) used 12 items, Butts et al. (2009) used 10 items, and Riorden et al. (2005) used 20 items from the Vandenberg et al.'s (1999) scale to measure PIRK variables.

The goodness-of-fit statistics related to the respecified CFA model of HIWPs showed a substantial improvement in the model fit to the data ($\chi^2 = 977.71$; $df = 224$, $p = .000$; χ^2/df ratio = 4.36; SRMR = .02; IFI = .97; TLI = .97; CFI = .97; PCFI = .86; and RMSEA = .04). Moreover, because MacCallum et al. (1996) emphasise that researchers should report confidence interval (CI) values of RMSEA, these are reported in parenthesis along with the RMSEA values in all fit statistics Tables. A wide confidence interval indicates that the estimated value of RMSEA is quite imprecise, whereas a narrow confidence interval suggests increased precision of the RMSEA value (MacCallum et al., 1996). Figure 2 shows the first-order four factors structure of HIWPs, factor loading values for each item retained for subsequent analyses, and the correlation among the four factors. Table 7 shows the comparison of goodness-of-fit statistics of three alternative models of HIWPs.

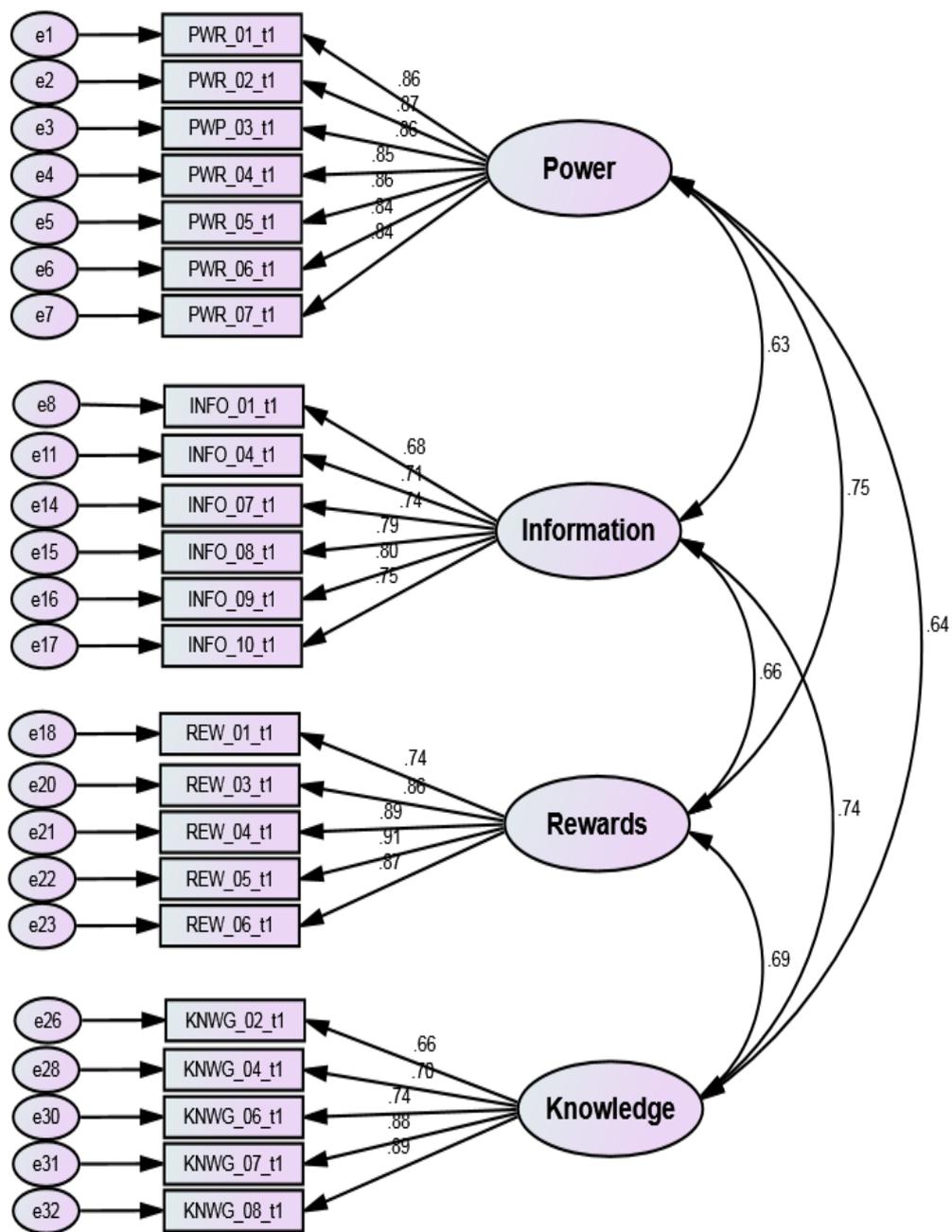


Figure 2. CFA of HIWPs Measurement Instrument as first-order four distinct variables, standardised factor loadings and correlations among first-order latent variables

Table 7
Comparison of CFA of HIWPs Factorial Structure

Model fit indices										Model differences			
Model	χ^2	<i>df</i>	χ^2/df	SRMR	IFI	TLI	CFI	PCFI	RMSEA (CI)	$\Delta\chi^2$	Δdf	p	Details
Model 1	4421.1	460	9.61	.04	.90	.89	.90	.84	.07 (.072, .076)				
Model 2	4291.5	458	9.37	.03	.91	.90	.91	.84	.07 (.059, .063)	129.5	2	0.00	Model 1 to 2
Model 3	14145.5	464	30.48	.08	.67	.65	.67	.63	.13 (.136, .140)	9724.3	4	0.00	Model 1 to 3
Model 4	977.7	224	4.36	.02	.97	.97	.97	.86	.04 (.044, .050)	3443.4	236	0.00	Model 1 to 4

Model 1. HIWPs as a second order latent variable comprised of first-order four factors

Model 2. HIWPs as first-order four factors: power, information, reward, and knowledge

Model 3. HIWPs as a single latent variable – all 32 items loading onto one factor

Model 4. As model 2, however, after deleting items that had a high level of content overlap

Table 8 shows the standardised and unstandardised regression weights (factor loadings) of all 23 measurement items of PIRK variables of HIWPs. The Critical Ratio (C.R.) value represents the unstandardised parameter estimate divided by its standard error, so it operates as a z-statistic whose value should be $> \pm 1.96$ (Byrne, 2010, p. 68). An analysis of Table 8 reveals that all items loaded well on to their respective factors, thus confirming the four-factor structure of HIWPs.

Table 8
Standardised and Unstandardised Parameter Estimates (factor loadings) for HIWPs Measurement Items

			Std. Est.	Un-std. Est	S.E.	C.R.	P
PWR_07_t1	<---	Power	.841	1.028	.024	43.686	***
PWR_06_t1	<---	Power	.842	1.104	.025	43.751	***
PWR_05_t1	<---	Power	.863	1.049	.023	45.738	***
PWR_04_t1	<---	Power	.847	1.039	.024	44.211	***
PWP_03_t1	<---	Power	.859	1.068	.024	45.391	***
PWR_02_t1	<---	Power	.867	1.064	.023	46.151	***
PWR_01_t1	<---	Power	.860	1.000			
INFO_01_t1	<---	Information	.679	.859	.034	25.154	***
INFO_07_t1	<---	Information	.746	1.046	.039	27.020	***
INFO_04_t1	<---	Information	.700	1.000			
INFO_08_t1	<---	Information	.805	1.132	.039	28.929	***
INFO_09_t1	<---	Information	.802	1.125	.039	28.860	***
INFO_10_t1	<---	Information	.751	1.090	.040	27.177	***
REW_06_t1	<---	Reward	.871	1.147	.032	35.834	***
REW_05_t1	<---	Reward	.908	1.190	.032	37.576	***
REW_04_t1	<---	Reward	.894	1.210	.033	36.926	***
REW_03_t1	<---	Reward	.861	1.127	.032	35.382	***
REW_01_t1	<---	Rewards	.744	1.000			
KNWG_07_t1	<---	Knowledge	.879	1.340	.045	29.463	***
KNWG_06_t1	<---	Knowledge	.743	1.380	.054	25.775	***
KNWG_04_t1	<---	Knowledge	.703	1.124	.046	24.601	***
KNWG_02_t1	<---	Knowledge	.659	1.000			
KNWG_08_t1	<---	Knowledge	.886	1.314	.044	29.626	***

Note. Std. Est. = standardised estimate; Un-std. Est. = unstandardised estimate; S.E. = standard error; C.R. = critical ratio; P = probability, standard errors of unstandardised estimates are presented

3.6.2 The Mediating Variables – Organisational Justice and Politics

3.6.2.1 Organisational Justice. Organisational justice has been defined as “the perceived adherence to rules that reflect appropriateness in decision context” (Colquitt & Rodell, 2015, p. 188). Organisational justice researchers seem to agree that employees appraise the fairness of an organisation by evaluating the four distinct facets of justice – distributive, procedural, interpersonal, and informational justice (Colquitt, 2001; Bies, 2005; Colquitt, Long, Rodell, & Halvorsen-Ganepola, 2015). Distributive justice reflects the degree to which decision outcomes follow equity, equality, and need rules; procedural justice reflects the degree to which decision making processes follow consistency, bias-suppression, accuracy, correctability, representativeness, ethicality, process control, and decision control rules; Interpersonal justice reflects the degree to which the enactment of procedures follows respect and propriety rules; and finally, informational justice reflects the extent to which employees are provided explanations for decisions following truthfulness and justification rules (Colquitt & Rodell, 2015; Rodell et al., 2017).

Nevertheless, some issues in measuring employees’ perceptions of organisational justice exist. First, some scholars have conceptualised and measured “justice” and “fairness” as separate constructs in their studies. For example, Ambrose and Schminke (2009) conducted a study in which they conceptualised “overall justice” as a mediator of the relationship between specific types of justice and outcomes. Example items of their overall justice construct include: “Overall, I’m treated fairly by my organisation”, and “In general, I can count on this organisation to be fair” (Ambrose and Schminke, 2009, p. 493). Similarly, Kim and Leung (2007) conducted a study to examine the cross cultural (USA, China, Korea, and Japan) differences in distributive, procedural, and interactional justice perceptions, and

included “overall fairness” as a separate construct in their structural model. Example items of their overall fairness construct include: “Overall, I believe I receive fair treatment from this organisation”, and “All in all this organisation treats me fairly” (Kim & Leung, 2007, p. 94).

The second issue pertaining to the measurement of justice perceptions is who or what is being evaluated: the “supervisor” or “organisation” (Cropanzano, Byrne, Bobocel, & Rupp, 2001). Based on the fairness theory, Cropanzano et al. (2001) argue that employees differentiate between the treatment they receive from various “social entities” in the workplace including supervisors, co-workers, and the organisation as a whole (p. 189). Thus, organisation-focused justice reflects the degree to which one’s organisation or top management is perceived to be fair, whereas, supervisor-focused justice reflects the degree to which one’s supervisor is perceived to be fair (Colquitt & Rodell, 2015). In short, participants should be clearly instructed to appraise a specific entity in their responses: supervisor, group, or the organisation as a whole (Cropanzano et al., 2001).

To address both issues discussed above, in the current study employees’ perceptions of distributive and procedural justice were measured by referring them to the extent to which their organisations adhere to related justice rules, while interpersonal and informational justice were measured by referring them to the extent to which their supervisors adhere to related justice rules.

Employees’ perceptions of organisational justice were measured using the 20-item scale developed and validated by Colquitt (2001). Procedural justice was measured using a 7-item scale. Distributive justice was measured using a 4-item scale. Interpersonal justice was measured using a 4-item scale. Informational justice

was measured using a 5-item scale. Participants indicated the extent to which they agreed with each item by using a 5-point Likert scale ranging from 1 (to a very small extent) to 5 (to a very large extent).

To confirm the factorial structure of organisational justice construct, three plausible CFA models were analysed. In model one, organisational justice was operationalised as a first-order construct comprising four distinct but correlated factors: distributive justice, procedural justice, interpersonal justice, and informational justice. Following the CFA procedure in AMOS, first, each item was set to a nonzero loading on the related justice dimension it was designed to measure, and a zero loading on all other justice dimensions. Second, all four justice dimensions were correlated. Third, the error terms associated with each item were uncorrelated.

The chi-square statistic related to the hypothesised four-factor structure of organisational justice revealed that the model is slightly less well fitting (compared to the cut-off criteria) to the data ($\chi^2 = 1699.28$; $df = 164$, $p = .000$; χ^2/df ratio = 10.36; SRMR = .03; IFI = .93; TLI = .91; CFI = .93; PCFI = .86; and RMSEA = .07). The χ^2/df ratio and RMSEA values were slightly greater than the threshold values. However, the adjunct goodness-of-fit indices revealed that the model fits the data very well. One possible reason for the large χ^2 statistic may be the large sample size, $n = 1554$, in the present study.

In model two, the organisational justice construct was analysed as a second-order latent variable comprised four-first order latent variables. The goodness-of-fit indices related to model two were similar to model one ($\chi^2 = 1700.41.28$; $df = 166$, $p = .000$; χ^2/df ratio = 10.24; SRMR = .03; IFI = .93; TLI = .92; CFI = .93; PCFI = .81;

and RMSEA = .07), suggesting that organisational justice fits data equally well either as a first-order or second-order model.

In model three, organisational justice was conceptualised as a unidimensional construct, with all items loading onto single latent variable. The goodness-of-fit statistics related to this model revealed the worst fit of the three to the sample data ($\chi^2 = 7146.69$; $df = 170$, $p = .000$; χ^2/df ratio = 42.03; SRMR = .10; IFI = .68; TLI = .64; CFI = .68; PCFI = .60; and RMSEA = .16). The analysis of alternative factorial structures of organisational justice construct confirmed that the original four-factor structure best fits the sample data. However, since this model was slightly less (compared to cut-off criteria) well fitting, MIs related to this model were analysed to identify the source of specification error.

A review of the MIs related to model one revealed that there is a high level of content overlap between items 3 and 4 (MI = 111.55) of the “procedural justice” dimension, 3 and 4 (MI = 233.25) of the “interpersonal justice” dimension, and 1 and 2 (MI = 113.24) of the “informational justice” dimension.

The wording of items 3 and 4 of the procedural justice dimension is as follows:

Item 3: *Have those procedures been applied consistently?*

Item 4: *Have those procedures free of bias?*

The wording of items 3 and 4 of the interpersonal justice dimension is as follows:

Item 3: *Does your supervisor treat you with respect.*

Item 4: *Does your supervisor refrain from making improper remarks?*

The wording of items 1 and 2 of the informational justice dimension is as follows:

Item 1: Has your supervisor been candid in communication with you?

Item 2: Does your supervisor explain decision procedures thoroughly?

As Byrne (2010) states, content overlap may occur even when the items are worded differently, and an analysis of the wording of items in each pair revealed subtle differences in the exact meanings of items in each pair. However, some content overlap also exists. For example, one may perceive the two events same: a supervisor candid in communication or a supervisor provides thorough explanation. Consequently, the MIs indicated specification error, thus item 3 from the procedural justice dimension, item 4 from the interpersonal justice dimension, and item 2 from the informational justice dimension were deleted. After deleting three items from organisational justice scale, fit statistics related to the respecified model indicated a good fit to the sample data ($\chi^2 = 885.84$; $df = 113$, $p = .000$; χ^2/df ratio = 7.83; SRMR = .03; IFI = .96; TLI = .95; CFI = .96; PCFI = .80; and RMSEA = .06). This respecified model was retained for subsequent analyses in the present study. Figure 3 shows the schematic representation of the CFA of the organisational justice scale. While, Table 9 shows the comparison of goodness-of-fit of alternative factorial structure of organisational justice measurement scale.

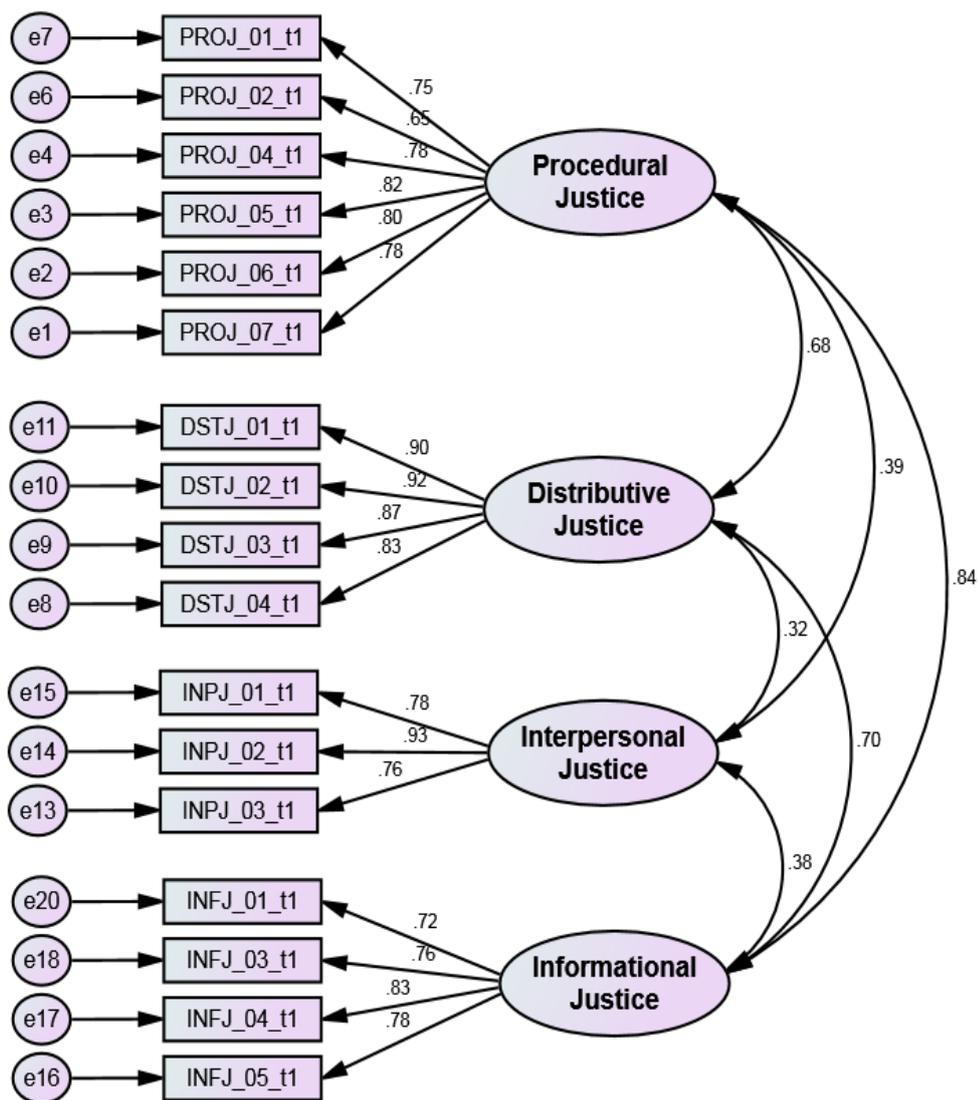


Figure 3. CFA of organisational justice measurement instrument, standardised factor loading, and correlation among first-order four factors.

Table 9
Comparison of Alternative CFA Models of Organisational Justice

Model fit indices										Model differences			
Model	χ^2	<i>df</i>	χ^2/df	SRMR	IFI	TLI	CFI	PCFI	RMSEA (CI)	$\Delta\chi^2$	Δdf	p	Details
Model 1	1699.2	164	10.36	.03	.93	.91	.93	.86	.07 (.074, .081)				
Model 2	1700.4	166	9.37	.03	.93	.92	.93	.81	.07 (.074, .080)	1.2	2	0.00	Model 1 to 2
Model 3	7146.6	170	42.03	.10	.68	.64	.68	.60	.16 (.159, .166)	5447.4	6	0.00	Model 1 to 3
Model 4	885.8	113	7.83	.03	.96	.95	.96	.80	.06 (.062, .070)	813.4	51	0.00	Model 1 to 4

Model 1. Organisational Justice as a first-order four factors construct: procedural justice, distributive justice, interpersonal justice, and informational justice

Model 2. Organisational Justice as a second-order latent variable comprised first-order four factors

Model 3. Organisational Justice as a single latent variable – all 20 items loading onto one factor

Model 4. As model 1, however, after deleting 3 items that had a high level of content overlap

Table 10 shows the standardised and unstandardised factor loadings of the measurement instrument of organisational justice. All items loaded well onto their respective factors, confirming the factorial validity of organisational justice measurement instrument.

Table 10
Standardised and Unstandardised Factor Loadings of Organisational Justice Measurement Items

			Std. Est.	Un-std. Est.	S.E.	C.R.	P
PROJ_07_t1	<---	Proc. Justice	.771	1.149	.037	30.922	***
PROJ_06_t1	<---	Proc. Justice	.790	1.127	.035	31.793	***
PROJ_05_t1	<---	Proc. Justice	.803	1.188	.037	32.394	***
PROJ_04_t1	<---	Proc. Justice	.800	1.215	.038	32.229	***
PROJ_02_t1	<---	Proc. Justice	.665	.982	.037	26.282	***
PROJ_01_t1	<---	Proc. Justice	.748	1.000			
DSTJ_04_t1	<---	Dist. Justice	.828	.987	.022	44.774	***
DSTJ_03_t1	<---	Dist. Justice	.875	1.045	.021	50.211	***
DSTJ_02_t1	<---	Dist. Justice	.923	1.039	.018	56.512	***
DSTJ_01_t1	<---	Dist. Justice	.895	1.000			
INPJ_03_t1	<---	Intp. Justice	.760	1.056	.034	31.367	***
INPJ_02_t1	<---	Intp. Justice	.931	1.186	.034	34.719	***
INPJ_01_t1	<---	Intp. Justice	.781	1.000			
INFJ_05_t1	<---	Info. Justice	.780	1.217	.042	28.877	***
INFJ_04_t1	<---	Info. Justice	.830	1.272	.042	30.605	***
INFJ_03_t1	<---	Info. Justice	.758	1.191	.042	28.106	***
INFJ_01_t1	<---	Info. Justice	.716	1.000			

Note. Std. Est. = standardised estimates; Un-std. Est. = unstandardised estimates; S.E. = standard error; C.R. = critical ratio; P = probability, standard errors of unstandardised estimates are presented

3.6.2.2 Organisational Politics. Although neutral or positive views of politics also exist (e.g., Hochwarter, 2012; Hochwarter et al., 2010), more than three decades of research suggests that employees perceive organisational politics as illegitimate, and non-sanctioned behaviours often enacted behind the scenes to control for power and resources (Mintzberg, 1985; Drory & Romm, 1988; Cropanzano et al., 1997; Aryee et al., 2004; Rosen, Harris, & Kacmar, 2009). Under

this perspective, organisational politics is defined as “actions by individuals which are directed toward the goal of furthering their own self-interests without regard for the well-being of others or their organisation” (Kacmar & Barron, 1999, p. 4).

Following the definition stated above, this study measured employees’ perceptions of organisational politics using a 12-item scale developed and validated by Kacmar and Ferris (1991). Kacmar and Carlson (1997) reported further evidence for the validity of this scale. This scale comprised three sub-dimensions of perceptions of politics: general political behaviour (6 items), go along to get ahead (4 items), and pay and promotion policies (2 items). Since organisational politics is a negative construct, four positive items of go along to get ahead dimension and two positive items of pay and promotion dimension were reverse scored, so the higher score indicates perceptions of higher politics. Participants indicated the extent to which they agreed with each item by using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Employees were asked to assess the extent to which they perceived that the characteristics of their work environment including organisational policies and practices, supervisor behaviour, and co-worker’s behaviour were political in nature.

This scale was selected for two reasons. First, this scale is consistent with the organisational politics definition adopted in this study. For example, employees indicated the extent to which they perceive that “pay and promotion policies are not politically applied” (pay and promotion dimension), and “people here don’t speak up for fear of retaliation” (go along to get ahead dimension). Second, this scale comprised items that measure both proactive promotion of self-interests, for example, “people build themselves up by tearing others down”, as well as defensive behaviours, for example, “there is no place for yes men”. Ashforth and Lee (1990)

point out that the literature on organisational politics has focussed on the proactive promotion of self-interests behaviour but neglected the defensive behaviour that is also “a subset of political behaviours” (p. 622).

However, there is a considerable debate in the literature whether Kacmar and Ferris's (1991) politics scale is unidimensional or multidimensional. For example, Nye and Witt (1993) examined the multidimensionality and construct validity of this scale using principle component and confirmatory factor analyses from 1,297 employees. Based on study results, they suggest that Kacmar and Ferris's (1991) politics scale is unidimensional rather than multidimensional (Nye & Witt, 1993). Kacmar and Carlson (1997) further examined this scale and argue that three factor solution best fits to the data, however, they found that overall fit was modest ($\chi^2 = 498.76$; NFI = .87; CFI = .88; PNFI = .67; RMSEA = .10), indicating some specification error.

Following Kacmar and Ferris (1991), some researchers (e.g., Rosen et al., 2006; Randall et al., 1999; Abbas et al., 2014) have also treated organisational politics as a second-order latent variable. Randall et al. (1999) argue that the perceptions of politics scale can be conceptualised as either a three-factor or a one-factor solution, however, based on previous research a one-factor model is more parsimonious. Due to issues related to the politics scale discussed above, a series of confirmatory factor analyses were performed in the present study to find out the best fitting model to the sample data.

In model one, organisational politics was hypothesized as a second-order latent variable comprised three first-order factors. Following CFA procedure, first, each item was set to have a nonzero loading on the related politics dimension it was

designed to measure, and zero loading on other two politics dimensions. Second, three politics factors and the error terms associated with each item were uncorrelated. Third, a second-order latent variable was drawn and three factor loading paths were specified from the second-order latent variable to three first-order factors. The goodness-of-fit indices related to this model indicated a poor fit to the sample data ($\chi^2 = 1756.60$; $df = 51$, $p = .000$; χ^2/df ratio = 34.44; SRMR = .05; IFI = .86; TLI = .82; CFI = .86; PCFI = .66; and RMSEA = .14).

In model two, organisational politics was operationalised as a three first-order factors construct: (1) general political behaviour, (2) go along to get ahead, and (3) pay and promotion policies. Following CFA procedure, first, each item was set to have a nonzero loading on the related politics dimension it was designed to measure, and zero loading on other two politics dimensions. Second, three politics factors were correlated, and third, the error terms associated with each item were uncorrelated. The goodness-of-fit statistics of this model resulted in exactly the same as model one ($\chi^2 = 1756.60$; $df = 51$, $p = .000$; χ^2/df ratio = 34.44; SRMR = .05; IFI = .86; TLI = .82; CFI = .86; PCFI = .66; and RMSEA = .14) suggesting that organisational politics can be operationalised as either a second-order latent variable or as a first-order three latent factors model.

In model three, organisational politics was conceptualised as a two first-order factors construct: (1) general political behaviour, and (2) go along to get ahead. Following this structure of politics scale, pay and promotion dimension was deleted, and its' two positively worded items were loaded onto go along to get ahead dimension as this dimension also comprised four positive worded items. The goodness-of-fit indices related to this model resulted in the worst fit to the data of the

models tested ($\chi^2 = 2701.91$; $df = 53$, $p = .000$; χ^2/df ratio = 50.97; SRMR = .07; IFI = .78; TLI = .73; CFI = .78; PCFI = .63; and RMSEA = .17).

In model four, following Nye and Witt (1993) construct validity of politics scale, organisational politics was hypothesised as a unidimensional construct. All 12 items of organisational politics were set to have nonzero loadings on a single latent variable. The goodness-of-fit indices for this model resulted in approximately the same as the two-factor structure ($\chi^2 = 2750.13$; $df = 54$, $p = .000$; χ^2/df ratio = 50.92; SRMR = .07; IFI = .78; TLI = .73; CFI = .78; PCFI = .64; and RMSEA = .17) but not better than model 1 and model 2.

The four models tested above revealed that no one model of organisational politics fits the data very well. Nevertheless, both organisational politics as a first-order three factor model and organisational politics as a second-order latent variable model fit the data better than other two models. So, consistent with previous research (e.g., Rosen et al., 2006; Abbas et al., 2014), and in the interest of parsimony, second-order latent variable model of organisational politics was retained for further analysis.

Modification indices related to this second-order latent variable model showed that there was a high level of content overlap between items 1 and 2 (MI = 631.32), 3 and 4 (MI = 143.82), and 5 and 6 (MI = 193.98) of the “general political behaviour” dimension of the organisational politics scale. Similarly, items 7 and 8 (MI = 266.50) of the “go along to get ahead” dimension of organisational politics also revealed a specification error suggestive of post hoc model fitting in order to improve the fit of the model to data.

The wording of items 1 and 2 of the general political behaviour dimension is as follows:

Item 1: *One group always get their way.*

Item 2: *Influential group no one crosses.*

As it can be seen that there is a high degree of content overlap between item 1 and 2, the item 1 was deleted from the general political behaviour dimension of organisational politics scale.

The wording of items 3 and 4 of the general political behaviour dimension is as follows:

Item 3: *Policy changes help only a few*

Item 4: *People build themselves up by tearing others down.*

Although the wording of the items 3 and 4 do not have content overlap as obvious as other pairs of items with high modification indices, they do both relate to the notion that some individuals will “rise to the top” at the expense of others. Thus, item 3 was deleted from the general political behaviour dimension of organisational politics construct.

The wording of items 5 and 6 of the general political behaviour dimension is as follows:

Item 5: *Favouritism not merit gets people ahead.*

Item 6: *People here don't speak up for fear of retaliation.*

Again, the items 5 and 6 are not as obvious in the way they overlap as other pairs, but both relate to the notion that ingratiation / relationship building by subordinates

is beneficial in getting ahead or avoiding sanctions. In addition, an MI value of 193.98 and an expected parameter change statistic value of .19 indicate a serious threat to the validity of the measurement model. Therefore, item 5 was deleted from the general political behaviour dimension of organisational politics construct.

The wording of items 7 and 8 of the “go along to get ahead” dimension is as follows:

Item 7: Promotions go to top performers. (Reverse scored)

Item 8: Rewards come to hard workers. (Reverse scored)

Items 7 and 8 are assessing a very similar concept, and the modification index value related to error terms associated with these two items also indicated a high level content overlap (MI = 266.50). Therefore, item 8 was deleted from the go along to get ahead dimension of organisational politics construct.

After deleting 3 items from the general political behaviour dimension and 1 item from the go along to get ahead dimension, the final measurement instrument of organisational politics (model 5) comprised 8 items (general political behaviour = 3 items, go along to get ahead = 3 items, and pay and promotion = 2 items). The step-wise deletion of items with high level of content overlap resulted in a substantial improvement in fitting the model to the data ($\chi^2 = 156.52$; $df = 17$, $p = .000$; χ^2/df ratio = 9.20; SRMR = .02; IFI = .98; TLI = .97; CFI = .98; PCFI = .59; and RMSEA = .07). Although the chi-square/degree of freedom ratio is higher than the recommended values of 2 – 5, the adjunct goodness-of-fit statistics revealed that the model fits the data very well. Figure 4 shows the schematic representation of the CFA of the organisational politics scale. Table 11 shows the comparison of goodness-of-fit statistics related to the CFA of politics scale.

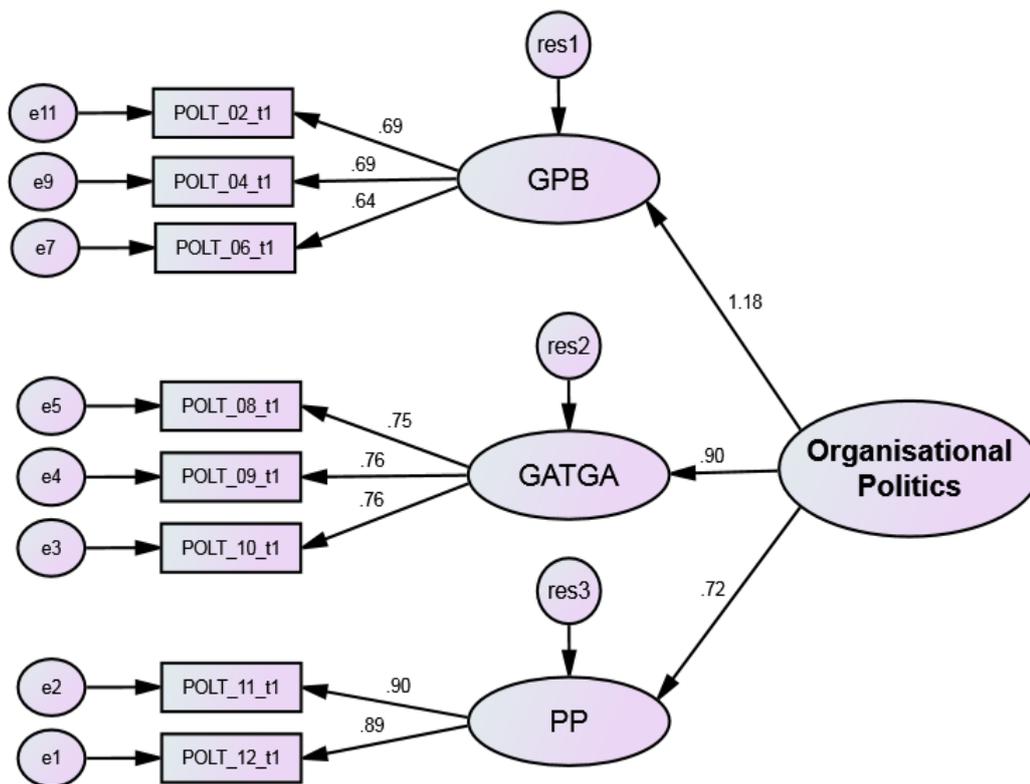


Figure 4. CFA of organisational politics measurement instrument as a second-order latent variable.

Table 11
Comparison of Alternative CFA Models of Organisational Politics

Model fit indices										Model differences			
Model	χ^2	<i>df</i>	χ^2/df	SRMR	IFI	TLI	CFI	PCFI	RMSEA (CI)	$\Delta\chi^2$	Δdf	p	Details
Model 1	1756.6	51	34.44	.05	.86	.82	.86	.66	.14 (.141, .153)				
Model 2	1756.6	51	34.44	.05	.86	.82	.86	.66	.14 (.141, .153)	0.00	0	0.00	Model 1 to 2
Model 3	2701.9	53	50.97	.07	.78	.73	.78	.63	.17 (.174, .185)	945.3	2	0.00	Model 1 to 3
Model 4	2750.1	54	50.92	.07	.78	.73	.78	.63	.17 (.174, .185)	993.5	3	0.00	Model 1 to 4
Model 5	156.5	17	9.20	.02	.98	.97	.98	.59	.07 (.063, .083)	1600.1	34	0.00	Model 1 to 5

Model 1: Organisational Politics as a second-order latent variable model comprised first-order three factors

Model 2. Organisational Politics as a first-order three factor model: general political behaviour, go along to get ahead, and pay and promotion

Model 3. Organisational Politics as a first-order two factor model – general political behaviour and go along to get ahead

Model 4. Organisational Politics as a single latent variable – all 12 items loading onto one latent variable

Model 5. As with model 1, but after deleting 4 items that had a high level of content overlap

Table 12 shows the standardised and unstandardised factor loadings of organisational politics items. All items loaded strongly onto their respective factors confirming a three-factor solution to the politics construct. The parameter estimates from latent variable to first-order factors were significant.

Table 12
Standardised and Unstandardised Factor Loadings of Politics Items

			Std. Est	Un-std. Est.	S.E.	C.R.	P
GPB	<---	Org. Politics	1.180	.749	.022	33.607	***
GATGA	<---	Org. Politics	.903	.667	.023	29.272	***
P and P	<---	Org. Politics	.724	.621	.022	27.831	***
POLT_02_t1	<---	GPB	.686	1.000			
POLT_04_t1	<---	GPB	.692	1.069	.039	26.753	***
POLT_06_t1	<---	GPB	.638	1.016	.041	24.778	***
POLT_08_t1	<---	GATGA	.749	1.000			
POLT_09_t1	<---	GATGA	.765	1.059	.036	29.716	***
POLT_10_t1	<---	GATGA	.759	1.003	.035	29.489	***
POLT_11_t1	<---	PP	.901	1.000			
POLT_12_t1	<---	PP	.888	1.011	.025	40.220	***

Note. Std. Est. = standardised estimate; Un-std. Est. = unstandardised estimate; S.E. = standard error; C.R. = critical ratio; P = probability, standard errors of unstandardised estimates are presented; GPB = general political behaviour; GATGA = go along to get ahead; P and P = pay and promotion

3.6.3 The Dependent Variables

3.6.3.1 Employee Engagement. Despite academic scepticism about utility and discriminant validity, the construct of employee engagement is enjoying popularity among organisational researchers and practitioners alike (Guest, 2014). Scholars in this area have offered a wide variety of definitions of employee engagement, two of which are most widely cited in the literature. The first definition to appear in the academic literature was proposed by Kahn (1990). He defined personal engagement as “the harnessing of organisation members’ selves to their

work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performance” (p. 694). Whereas, another influential definition was proposed by Schaufeli et al. (2002). They defined engagement as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (p. 74).

This study adapted Kahn’s (1990) definition of employee engagement. Following Kahn’s (1990) seminal work on engagement, Rich et al. (2010) developed an 18-item scale to measure the three sub-dimensions of employee engagement: physical engagement (6 items), cognitive engagement (6 items), and emotional engagement (6 items). As Rich et al.’s (2010) measure is consistent with Kahn’s (1990) definition and theory of engagement, this study used their measure. Participants indicated the extent to which they agreed with each item by using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Participants were asked to assess the extent to which they perceive that they are physically, cognitively, and mentally engaged in their work.

Employee engagement was operationalised as a second-order latent variable comprised of three first-order factors: physical engagement, emotional engagement, and cognitive engagement. Justification to conduct CFA for employee engagement as a second-order latent variable is based on the second-order versus first-order CFA results reported by Rich et al. (2010). They found that the second-order latent variable model fits the data better than the first-order three factor model. However, given that Rich et al.’s (2010) employee engagement construct is relatively new, CFAs were conducted to confirm whether the first order or second-order latent variable approach fits the data better.

In model one, employee engagement was operationalised as a second-order latent variable comprised of three first-order factors: physical engagement, emotional engagement, and cognitive engagement. Each item was set to have nonzero loading on the first-order factor it was designed to measure and zero loadings on the other two first-order factors. The error terms and the three first-order factors associated with each item were uncorrelated. The goodness-of-fit indices related to this model revealed that the model moderately fits the data ($\chi^2 = 1632.41$; $df = 132$, $p = .000$; χ^2/df ratio = 12.36; SRMR = .03; IFI = .91; TLI = .89; CFI = .91; PCFI = .78; and RMSEA = .08). To see whether any other model fits the data better than this model, two models were further explored using CFA procedures.

In model two, it was hypothesised that the responses to the employee engagement can be explained by three first-order factors. Each item was set to have nonzero loading on the employee engagement factor it was designed to measure and zero loadings on other two factors. The three employee engagement factors were correlated, and error terms associated with these items were uncorrelated. The goodness of fit statistics for this model resulted is approximately the same as model one (second-order latent variable), with minor changes in values at third decimal points (not shown here for consistency and simplicity) ($\chi^2 = 1632.41$; $df = 132$, $p = .000$; χ^2/df ratio = 12.36; SRMR = .03; IFI = .91; TLI = .89; CFI = .91; PCFI = .78; and RMSEA = .08).

In model three, employee engagement was hypothesised as a unidimensional latent variable. All 18 items were set to have nonzero loadings on a single employee engagement latent variable. The error terms associated with item measurement were uncorrelated. The goodness-of-fit statistics for this model resulted in a poor fit of the

model to the sample data ($\chi^2 = 3576.48$; $df = 135$, $p = .000$; χ^2/df ratio = 26.49; SRMR = .08; IFI = .79; TLI = .76; CFI = .79; PCFI = .70; and RMSEA = .12).

Clearly, CFAs suggest that the concept of employee engagement can be modelled either as a second-order latent variable comprising three first-order factors or as a three first-order factors correlated with each other. Since the fit statistics for both models were the same, model one was retained for further analyses as it was consistent with theoretical definition and the CFA results reported by Rich et al. (2010). A review of the modification indices revealed that four pairs of items from employee engagement factors have a high level of content overlap indicated by correlated error between items 1 and 2 (MI = 322.47), 2 and 3 (MI = 45.78) of “physical engagement” factor, 4 and 5 (MI = 117.80) of “emotional engagement” factor, and 1 and 2 (MI = 162.55) of “cognitive engagement” factor.

The wording of items 1, 2, and 3 of the physical engagement factor are as follows:

Item 1: *I work with intensity on my job.*

Item 2: *I exert my full effort on my job.*

The wording of items 2 and 3 of the physical engagement factor is as follows:

Item 2: *As stated above*

Item 3: *I devote a lot of energy to my job.*

There seems to be a content overlap between items 1, 2, and 3 as all three items are asking about more or less of the same thing or at least in a very similar fashion which may have caused specification error, so item 2 was deleted from the “physical engagement” factor of employee engagement.

The wording of items 4 and 5 of the emotional engagement factor is as follows:

Item 4: *I feel proud of my job.*

Item 5: *I feel positive about my job.*

An analysis of the wording of items 4 and 5 reveals less obvious content overlap but both do tap into the notion of a subjective, positive appraisal of the job. In addition, the empirical evidence indicated by a modification index value of 117.80 and an expected parameter change value of .102 revealed specification error, so item 5 was deleted from the emotional engagement factor of employee engagement.

The wording of items 7 and 8 of the cognitive engagement factor is as follows:

Item 1: *At work my mind is focussed on my job.*

Item 2: *At work, I pay a lot of attention on my job.*

An analysis of the wording of items 1 and 2 reveals that both items have obvious content overlap as paying attention could be very similar to focussing on job tasks. An MI value of 162.55 was also indicative of a very high degree of content overlap between the two items, so item 2 was deleted from the “cognitive engagement” dimension of employee engagement. After deleting one item from each dimension, the final measurement instrument of employee engagement comprised 15 items (5 items for each dimension). The goodness-of-fit indices for the respecified model of employee engagement shown a substantial improvement in model fit to the data ($\chi^2 = 614.42$; $df = 87$, $p = .000$; χ^2/df ratio = 7.06; SRMR = .03; IFI = .95; TLI = .94; CFI = .95; PCFI = .79; and RMSEA = .06). Figure 5 shows the schematic representation of the final CFA model of employee engagement. While, Table 13 shows the comparison of fit statistics of alternative measurement models of employee engagement.

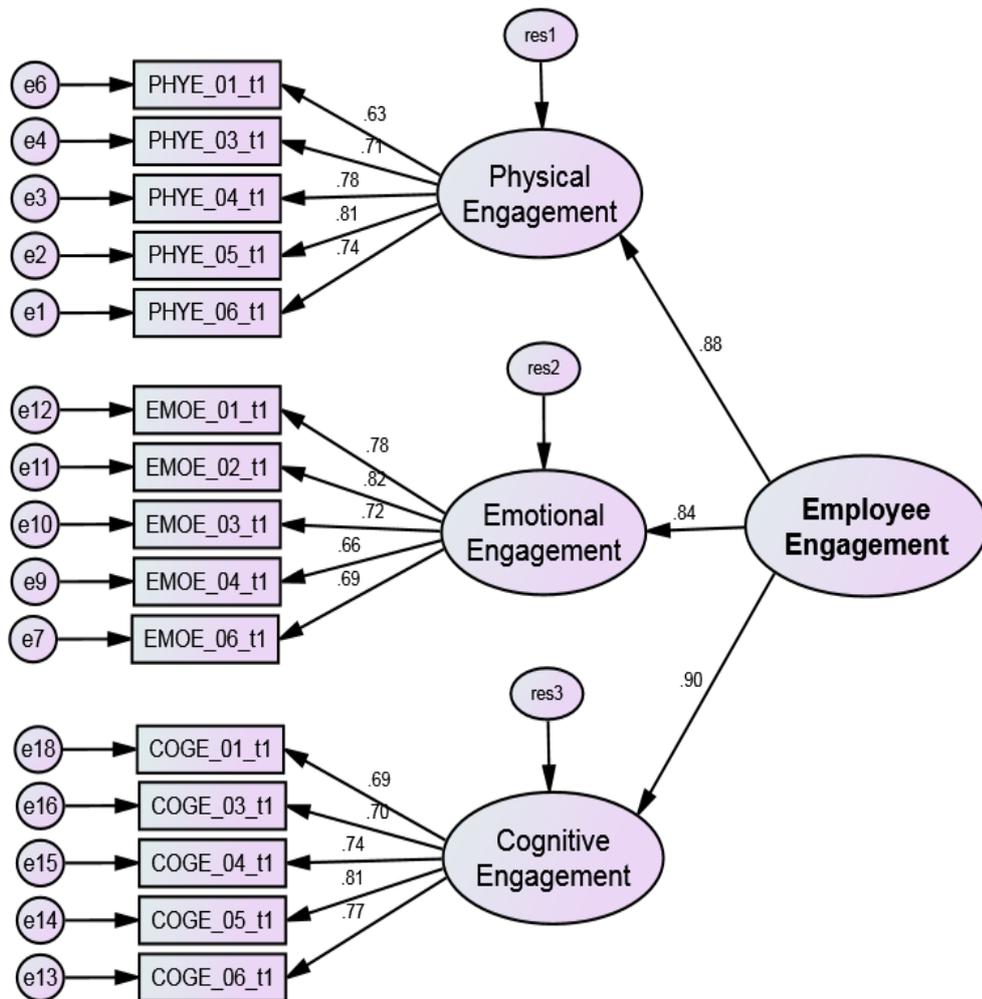


Figure 5. CFA of employee engagement measurement instrument as a second-order latent variable

Table 13
Comparison of Alternative CFA Models of Employee Engagement

Model fit indices										Model differences			
Model	χ^2	<i>df</i>	χ^2/df	SRMR	IFI	TLI	CFI	PCFI	RMSEA (CI)	$\Delta\chi^2$	Δdf	p	Details
Model 1	1632.4	132	10.36	.03	.91	.89	.91	.78	.08 (.082, .089)				
Model 2	1632.4	132	10.36	.03	.91	.89	.91	.78	.08 (.082, .089)	0.00	0	0.00	Model 1 to 2
Model 3	3576.4	135	26.49	.06	.79	.76	.79	.70	.12 (.125, .132)	1944	3	0.00	Model 1 to 3
Model 4	614.4	87	7.06	.03	.95	.94	.95	.79	.06 (.058, .067)	1018	45	0.00	Model 1 to 4

Model 1. Employee Engagement as a second-order latent variable

Model 2. Employee Engagement as a first-order three-factor model

Model 3. Employee Engagement as a single latent variable – all 18 items loading onto one factor

Model 4. As model 1, however, after deleting one item from each factor that had a high level of content overlap

Table 14 shows the standardised and unstandardised factor loadings of employee engagement items. All items loaded well onto their respective factors confirming the status of employee engagement as a second-order latent variable comprised three first-order factors.

Table 14
Standardised and Unstandardised Factor Loadings of Employee Engagement Items

			Std. Est	Un-std. Est.	S.E.	C.R.	P
Phy. Eng.	<---	Emp. Engagement	.878	.522	.019	27.777	***
Emo. Eng.	<---	Emp. Engagement	.842	.526	.021	25.406	***
Cog. Eng.	<---	Emp. Engagement	.898	.558	.019	29.893	***
PHYE_06_t1	<---	Phy. Engagement	.737	1.000			
PHYE_05_t1	<---	Phy. Engagement	.808	1.158	.038	30.659	***
PHYE_04_t1	<---	Phy. Engagement	.784	1.094	.037	29.741	***
PHYE_03_t1	<---	Phy. Engagement	.711	.953	.035	26.923	***
PHYE_01_t1	<---	Phy. Engagement	.627	.766	.032	23.674	***
EMOE_06_t1	<---	Emo. Engagement	.695	1.000			
EMOE_04_t1	<---	Emo. Engagement	.665	1.031	.043	23.904	***
EMOE_03_t1	<---	Emo. Engagement	.725	.998	.039	25.894	***
EMOE_02_t1	<---	Emo. Engagement	.821	1.060	.037	28.875	***
EMOE_01_t1	<---	Emo. Engagement	.783	1.075	.039	27.760	***
COGE_06_t1	<---	Cog. Engagement	.775	1.000			
COGE_05_t1	<---	Cog. Engagement	.810	1.026	.031	32.927	***
COGE_04_t1	<---	Cog. Engagement	.740	1.061	.036	29.711	***
COGE_03_t1	<---	Cog. Engagement	.705	.937	.033	28.106	***
COGE_01_t1	<---	Cog. Engagement	.695	.922	.033	27.640	***

Note. Std. Est. = standardised estimates; Un-std. Est. = un-standardised estimates; S.E. = standard error; C.R. = critical ratio; P = probability; standard errors of un-standardised estimates are presented; Phy = Physical; Emo = emotional; Cog = cognitive; Emp = employee

3.6.3.2 Trust in Employer. Some scholars have conceptualised and measured trust as a unidimensional construct (e.g., Mayer et al., 1995; Rousseau et al., 1998), whereas others have considered trust as a multidimensional construct (e.g., McAllister, 1995; Lewis & Weigert, 1985). Mayer et al. (1995) defined trust as the unidimensional construct “the willingness of a party to be vulnerable to the actions of another party based on the expectations that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (p. 712). Similarly, Rousseau et al. (1998) defined trust as a “psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another” (p. 395). And, Robinson (1996) defined trust as “one’s expectations, or beliefs about the likelihood that another’s future actions will be beneficial, favourable, or at least not detrimental to one’s interests” (p. 576).

As a multidimensional construct, McAllister (1995) defined trust as “the extent to which a person is confident in, and willing to act on the basis of, the words, actions, and decisions of another” (p. 25). Based on Lewis and Weigert’s (1985) work on trust, McAllister (1995) distinguished between affect-based trust and cognition-based trust. The affect-based trust reflects one’s intense emotional investments, such as love and friendship as the foundation of trust, whereas, the cognitive-based trust reflects one’s confident positive expectations based on someone’s track record and reputation (Lewis & Weigert, 1985).

This study subscribed to the Mayer et al.’s (1995) definition of trust. Rousseau et al. (1998) examined the multidisciplinary literature on trust and found that the “willingness to be vulnerable” is the most common element in widely cited definitions of trust. Similarly, in a more recent article, McEvily and Tortoriello

(2011), note that “willingness to be vulnerable” and “expectation of positive treatment by another party” are the two most common elements in the widely cited definitions of trust. Therefore, this study measured trust using a well recognised 7-item scale developed by Robinson and Rousseau (1994) which has been frequently used in previous studies (e.g., Aryee et al., 2002; Robinson, 1996). Participants rated each statement using a five-point Likert scale, anchored from strongly disagree (1) to strongly agree (5). Respondents were referred to assess the extent to which they trust in the intentions and actions of their employer. The three negatively worded items were reverse scored so higher the score indicating higher the trust in employer.

Following on the definition and its measure used in this study, trust was treated as a first-order unidimensional latent variable. Therefore, CFA of the trust scale hypothesised a priori that responses to all seven-items can be explained by a single factor – trust in employer. Each item was set to have a nonzero loading on the trust construct, and the error terms associated with each item were uncorrelated. The goodness-of-fit indices of this model indicated that the model does not fit the data well ($\chi^2 = 398.69$; $df = 14$; $p = .000$; χ^2/df ratio = 28.47; SRMR = .04; IFI = .92; TLI = .88; CFI = .92; PCFI = .61; and RMSEA = .13), suggesting measurement error.

A review of the MIs revealed that item 6 has a high level of content overlap with items 5 (MI value = 240.44), and item 3 (MI value = 47.37). The wording of the items 3, 5, and 6 of the trust in employer “scale” is as follows:

Item 3: *I believe my employer has high integrity.*

Item 5: *My employer is not always honest and truthful. (Reverse Scored)*

Item 6: *I don't think my employer treats me fairly. (Reverse scored).*

An analysis of the wording of the items 3, 5, and 6 reveals content overlap as each item was asking about employees' perceptions of their employer's level of honesty. The MIs related to these three items also indicated specification errors, so item 6 was deleted from the "trust in employer" scale.

The goodness-of-fit indices related to the respecified model of trust in employer construct shown a substantial improvement and fit to the data ($\chi^2 = 110.76$; $df = 09$; $p = .000$; χ^2/df ratio = 12.30; SRMR = .02; IFI = .97; TLI = .95; CFI = .97; PCFI = .58; and RMSEA = .08). The significance of the improvement in model fit can be evaluated using a χ^2 difference test; difference in χ^2 ($398.69 - 110.76 = 287.93$) was statistically significant ($p < .001$) with ($14 - 9 = 5$) degrees of freedom. Figure 6 shows the diagrammatic representation of the CFA of trust in employer scale.

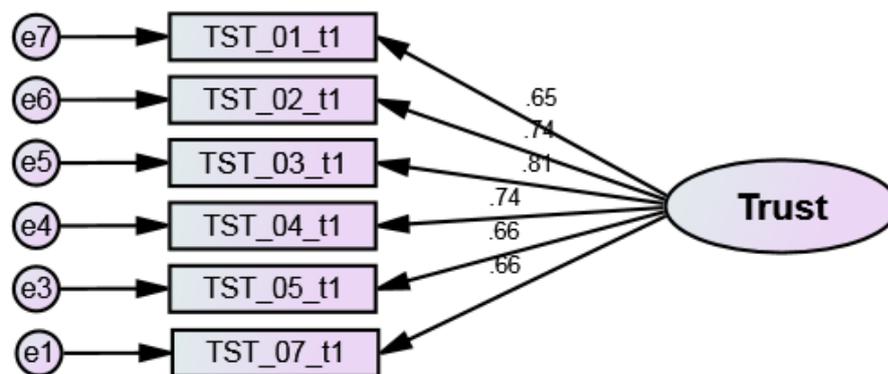


Figure 6. CFA of measurement instrument as a unidimensional latent variable

Table 15 shows the standardised and unstandardised factor loadings of items. All items loaded well onto one latent variable confirming that the construct is a unidimensional construct. Hair et al., (2016, p. 618) recommend that as a "rule of

thumb” standardised loading estimates should be .5 or above, however, ideally .7 or above. They further suggest that because unstandardised loadings represent covariances that have no lower and upper bound, in most cases, researchers should use standardised parameter estimates because they fall within the range of -1.0 to +1.0 (Hair et al., 2016, p. 618).

Table 15
Standardised and Unstandardised Factor Loadings of Trust Items

			Std. Est.	Un-std. Est.	S.E.	C.R.	P
TST_07_t1	<---	Trust	.657	1.000			
TST_05_t1	<---	Trust	.662	.940	.042	22.355	***
TST_04_t1	<---	Trust	.737	1.019	.042	24.386	***
TST_03_t1	<---	Trust	.813	1.045	.040	26.193	***
TST_02_t1	<---	Trust	.743	.970	.040	24.550	***
TST_01_t1	<---	Trust	.650	1.003	.046	22.005	***

Note. Std. Est. = standardised estimates; Un-std. Est. = unstandardised estimates; S.E. = standard error; C.R. = critical ratio; P = probability; standard error values belong to un-standardised estimates

3.7 The Final Measurement Model

After conducting the CFA for each measurement instrument, the goal was to develop and evaluate the fit of the overall measurement model. Hair et al. (2016, p. 583) point out that the use of goodness-of-fit statistics of separate constructs to assess the fit of overall measurement model is against the SEM approach as goodness-of-fit statistics are designed for testing the entire model not a single construct at a Time. They further point out that unless all of the constructs included in the study are tested collectively, the test of discriminant validity and item cross-loadings are impossible to determine (Hair et al., 2016, p. 583). Therefore, although confirmatory factor analysis for each construct separately provided a preliminary

evidence of fit, six alternative measurement models were assessed in which all observed and latent variables of this study were included collectively.

In assessing the fit of these six measurement models, items that were deleted during the CFAs for each construct were not included. In other words, only items that were included in the respecified CFA of each construct were used to develop and compare the fit statistics of the following alternative measurement models.

In model one, HIWPs were operationalised as four first-order variables: power, information, reward, and knowledge. Employee engagement was operationalised as a second-order latent variable comprised three first-order latent variables: physical engagement, emotional engagement, and cognitive engagement. Organisational politics was operationalised as a second-order latent variable comprised three first-order variables: go along to get ahead, general political behaviour, and pay and promotion. Organisational justice was operationalised as four first-order variables: procedural justice, distributive justice, interpersonal justice, and informational justice. Whereas trust in employer was operationalised as a unidimensional first-order latent variable. This specification of all variables in the measurement model was based on CFAs reported above. Following CFA procedures, each observed item was allowed to load onto its respective latent variable, and no error covariances were added. The second-order latent variables of organisational politics and employee engagement and all other first-order latent variables were correlated with each other. The goodness-of-fit indices indicated that the model fits the data very well ($\chi^2 = 5536.45$; $df = 2216$; $p = .000$; χ^2/df ratio = 2.50; SRMR = .02; IFI = .96; TLI = .96; CFI = .96; PCFI = .91; and RMSEA = .03).

In model two, HIWPs were operationalised as a second-order latent variable comprised of four first-order latent variables. Whereas all other variables in the model were operationalised same as with model one. Following CFA procedures, a second-order latent variable (HIWPs) was included in the measurement model and four single-headed arrows leading from the second-order factor (HIWPs) to each of the first-order factors (PIRK variables) were specified. For the purpose of model identification, one second-order factor-loading parameter was fixed to a value of 1.00 as all four parameters cannot be estimated simultaneously (Byrne, 2010, p. 130). Each observed item was set to have a nonzero loading on the factor it was designed to measure and zero loadings on all other factors in the model. The error terms associated with each item were uncorrelated and correlations among first-order factors were fully explained by regression paths on the second-order variable. The second-order latent variables of organisational politics, employee engagement, HIWPs, and all other first-order latent variables were correlated with each other. The fit statistics related to model two revealed that this model is slightly less well fitting to the data compared to the model 1 ($\chi^2 = 5901.33$; $df = 2239$; $p = .000$; χ^2/df ratio = 2.64; SRMR = .03; IFI = .95; TLI = .95; CFI = .95; PCFI = .91; and RMSEA = .03).

In model three, all variables were operationalised as model one, however, employee engagement was operationalised as three first-order factors: physical engagement, emotional engagement, and cognitive engagement. Following CFA procedures, the higher-order latent variable of employee engagement was removed from the diagram and all other variables in the model were correlated with three first-order factors of employee engagement. The goodness-of-fit statistics related to model three revealed that this model is equally well fitting as model one to the data

($\chi^2 = 5451.32$; $df = 2196$; $p = .000$; χ^2/df ratio = 2.48; SRMR = .02; IFI = .96; TLI = .96; CFI = .96; PCFI = .90; and RMSEA = .03). However, this model was slightly less parsimonious as compared to models one and two, indicated by the PCFI value.

In model four, all variables were operationalised as model one, however, organisational politics was operationalised as three first-order factors: general political behaviour, go along to get ahead, and pay and promotion. Following CFA procedures, the higher-order latent variable of organisational politics was removed from the diagram and the three first-order factors of organisational politics were correlated with all other latent variables. The goodness-of-fit statistics related to model 4 revealed that this model is equally well fitting as model one to the data ($\chi^2 = 5405.54$; $df = 2196$; $p = .000$; χ^2/df ratio = 2.46; SRMR = .02; IFI = .96; TLI = .96; CFI = .96; PCFI = .90; and RMSEA = .03). Again, this model was slightly less parsimonious as compared to model one and two as indicated by the PCFI value.

In model five, all variables were operationalised as first-order variables which resulted in 15 distinct latent variables. Each item was set to have nonzero loadings onto its' respective factor it was designed to measure and zero loadings on all other factors in the model. The error terms associated with each item were uncorrelated and all 15 variables were allowed to correlate with each other. The fit statistics related to model five revealed that this model also fits the data very well ($\chi^2 = 5317.70$; $df = 2172$; $p = .000$; χ^2/df ratio = 2.45; SRMR = .02; IFI = .96; TLI = .96; CFI = .96; PCFI = .89; and RMSEA = .03), however, slightly less parsimonious as indicated by the PCFI value.

In model six, all items were loaded onto a single latent variable. This model hypothesised a priori that responses to all items can be explained by a single factor.

Each item was set to have a nonzero loading on one latent variable, and the error terms associated with the item measurements were uncorrelated. The goodness-of-fit indices related to this model resulted in a worst fit to the data ($\chi^2 = 22271.44$; $df = 2277$; $p = .000$; χ^2/df ratio = 9.78; SRMR = .05; IFI = .75; TLI = .74; CFI = .75; PCFI = .72; and RMSEA = .07), confirming the discriminant validity of the constructs used in the present study (Hair et al., 2016, p. 619)

An analysis of goodness-of-fit statistics (see Table 16) related to the six alternative measurement models revealed that the first five measurement models fit the data very well, so a researcher could select any of these to test the hypothesised relationships among latent variables. Model one was selected to develop the structural model as it is parsimonious and may also provide more insights about the impact of HR practices associated with HIWPs on employee outcomes. Second, conceptualising employee engagement and organisational politics as second-order latent variables will help in drawing more meaningful conclusions. Figure 7 shows the diagrammatic representation of the CFA of the final measurement model. While, Table 16 shows the comparison of goodness-of-fit statistics of alternative measurement models.

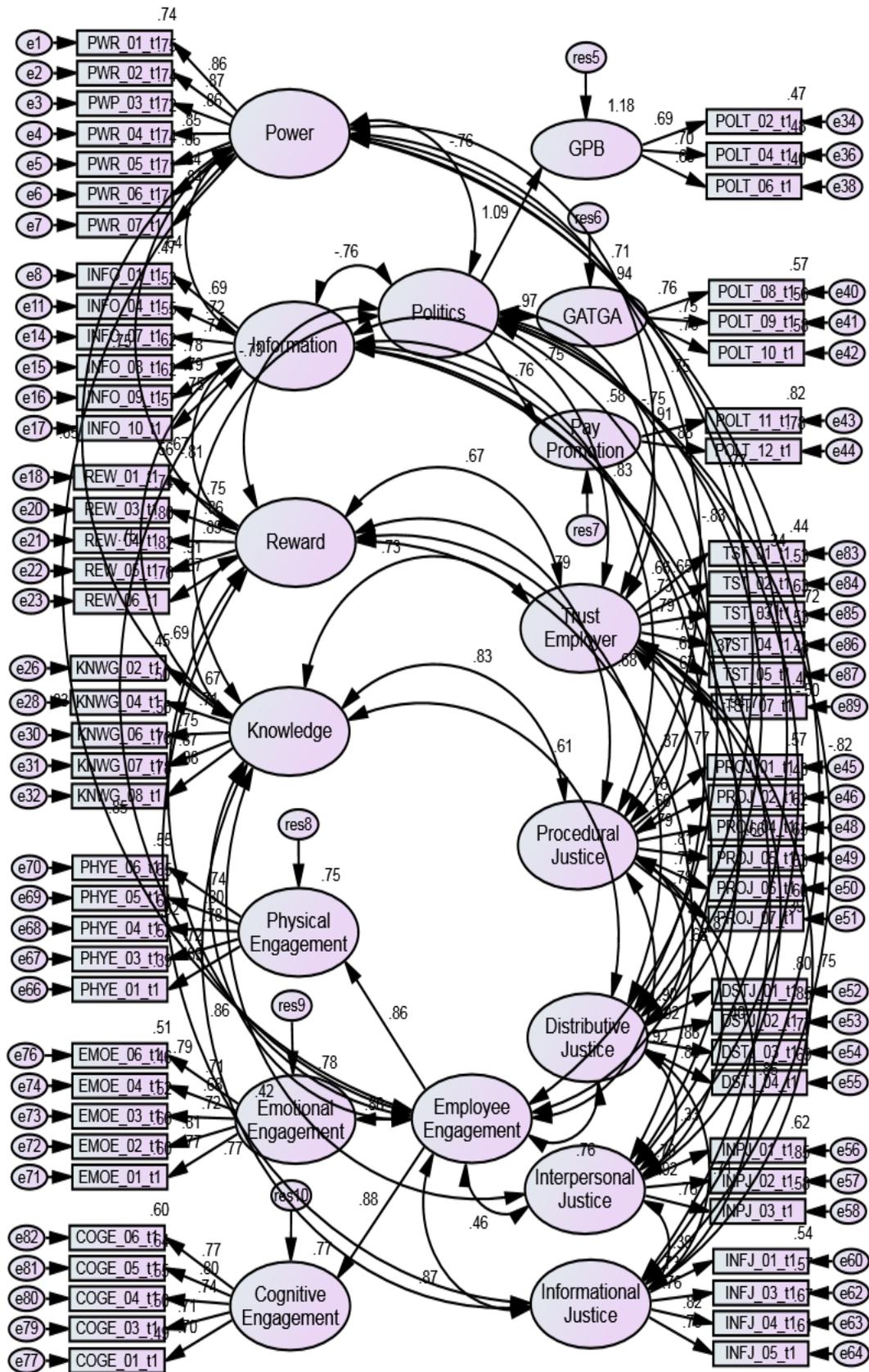


Figure 7. CFA of the final measurement model used to develop the structural model

Table 16
Comparison of Fit Statistics of Alternative Measurement Models

Model fit indices										Model differences			
Model	χ^2	<i>df</i>	χ^2/df	SRMR	IFI	TLI	CFI	PCFI	RMSEA (CI)	$\Delta\chi^2$	Δdf	p	Details
Model 1	5536.4	2216	2.50	.02	.96	.96	.96	.91	.03 (.030, .032)				
Model 2	5901.3	2239	2.64	.03	.95	.95	.95	.91	.03 (.031, .033)	364.9	23	0.00	Model 1 to 2
Model 3	5451.3	2196	2.48	.02	.96	.96	.96	.90	.03 (.030, .032)	85.1	20	0.00	Model 1 to 3
Model 4	5405.5	2196	2.46	.02	.96	.96	.96	.90	.03 (.030, .032)	130.9	20	0.00	Model 1 to 4
Model 5	5317.7	2172	2.45	.02	.96	.96	.96	.89	.03 (.029, .032)	218.7	44	0.00	Model 1 to 5
Model 6	22271.4	2277	9.78	.05	.75	.74	.75	.72	.07 (.074, .076)	16735.0	61	0.00	Model 1 to 6

Model 1. HIWPs as four first-order latent variables, employee engagement and organisational politics as second-order latent variables

Model 2. HIWPs as a second-order latent variable, employee engagement and organisational politics as second-order latent variables

Model 3. As with model 1, but employee engagement as first-order three factors

Model 4. As with model 1, but organisational politics as first-order three factors

Model 5. As 15 distinct first-order variables

Model 6. All items loading onto one latent variable.

Table 17
Standardised and Un-standardised Factor Loadings of the Final Measurement Model Items

			Stand. estimate	Un-stand. estimate	S.E.	C.R.	P
Physical Eng.	<---	Emp. Eng.	.863	1.000			
Emotional Eng.	<---	Emp. Eng.	.880	1.133	.045	25.12	***
Cognitive Eng.	<---	Emp. Eng.	.880	.981	.042	23.18	***
GBP	<---	Politics	1.180	1.000			
GATGA	<---	Politics	.968	1.042	.036	28.97	***
Pay Promotion	<---	Politics	.765	.954	.035	27.38	***
KNWG_08_t1	<---	Knowledge	.881	1.000			
KNWG_07_t1	<---	Knowledge	.872	1.018	.022	46.84	***
KNWG_06_t1	<---	Knowledge	.749	1.065	.030	35.94	***
KNWG_04_t1	<---	Knowledge	.709	.868	.026	33.05	***
KNWG_02_t1	<---	Knowledge	.668	.776	.026	30.26	***
PWR_07_t1	<---	Power	.840	1.000			
PWR_06_t1	<---	Power	.842	1.075	.026	42.13	***
PWR_05_t1	<---	Power	.862	1.021	.023	43.87	***
PWR_04_t1	<---	Power	.847	1.011	.024	42.49	***
PWP_03_t1	<---	Power	.859	1.040	.024	43.60	***
PWR_02_t1	<---	Power	.867	1.036	.023	44.24	***
PWR_01_t1	<---	Power	.861	.974	.022	43.75	***
INFO_10_t1	<---	Information	.753	1.000			
INFO_09_t1	<---	Information	.797	1.022	.032	31.69	***
INFO_08_t1	<---	Information	.795	1.022	.032	31.59	***
INFO_07_t1	<---	Information	.748	.959	.032	29.57	***
INFO_04_t1	<---	Information	.714	.932	.033	28.09	***
INFO_01_t1	<---	Information	.685	.794	.028	28.19	***
REW_06_t1	<---	Reward	.871	1.000			
REW_05_t1	<---	Reward	.906	1.035	.020	51.42	***
REW_04_t1	<---	Reward	.895	1.055	.021	50.06	***
REW_03_t1	<---	Reward	.861	.983	.021	46.36	***
REW_01_t1	<---	Reward	.746	.874	.024	36.05	***
PROJ_01_t1	<---	Proc. Justice	.757	1.000			
PROJ_02_t1	<---	Proc. Justice	.658	.962	.036	26.42	***
PROJ_04_t1	<---	Proc. Justice	.786	1.180	.037	32.30	***
PROJ_05_t1	<---	Proc. Justice	.808	1.182	.035	33.37	***
PROJ_06_t1	<---	Proc. Justice	.791	1.116	.034	32.56	***
PROJ_07_t1	<---	Proc. Justice	.776	1.144	.036	31.81	***
DSTJ_01_t1	<---	Dist. Justice	.896	1.000			
DSTJ_02_t1	<---	Dist. Justice	.920	1.035	.018	56.44	***
DSTJ_03_t1	<---	Dist. Justice	.876	1.046	.021	50.55	***
DSTJ_04_t1	<---	Dist. Justice	.731	.991	.022	45.31	***
INFJ_01_t1	<---	Info. Justice	.757	1.000			
INFJ_03_t1	<---	Info. Justice	.817	1.163	.040	29.03	***

(continued)

Table 17 (continued)
 Standardised and Un-standardised Factor Loadings of the Final Measurement Model
 Items

			Stand. estimate	Un-stand. estimate	S.E.	C.R.	P
DSTJ_04_t1	<---	Dist. Justice	.731	.991	.022	45.31	***
INFJ_01_t1	<---	Info. Justice	.757	1.000			
INFJ_03_t1	<---	Info. Justice	.817	1.163	.040	29.03	***
INFJ_04_t1	<---	Info. Justice	.781	1.224	.039	31.39	***
INFJ_05_t1	<---	Info. Justice	.787	1.193	.040	29.99	***
INPJ_01_t1	<---	Intp. Justice	.922	1.000			
INPJ_02_t1	<---	Intp. Justice	.764	1.164	.033	35.55	***
INPJ_03_t1	<---	Intp. Justice	.663	1.053	.033	31.68	***
TST_01_t1	<---	Trust	.725	1.000			
TST_02_t1	<---	Trust	.791	.925	.037	24.98	***
TST_03_t1	<---	Trust	.729	.993	.037	26.82	***
TST_04_t1	<---	Trust	.691	.984	.039	25.08	***
TST_05_t1	<---	Trust	.675	.958	.040	23.98	***
TST_07_t1	<---	Trust	.628	1.003	.043	23.49	***
PHYE_01_t1	<---	Phys. Eng.	.718	.763	.032	23.98	***
PHYE_03_t1	<---	Phys. Eng.	.778	.959	.035	27.62	***
PHYE_04_t1	<---	Phys. Eng.	.804	1.081	.036	30.04	***
PHYE_05_t1	<---	Phys. Eng.	.740	1.147	.037	31.08	***
PHYE_06_t1	<---	Phys. Eng.	.773	1.000			
EMOE_01_t1	<---	Emo. Eng.	.810	1.000			
EMOE_02_t1	<---	Emo. Eng.	.721	.986	.030	33.31	***
EMOE_03_t1	<---	Emo. Eng.	.676	.935	.032	29.13	***
EMOE_04_t1	<---	Emo. Eng.	.712	.989	.037	27.05	***
EMOE_06_t1	<---	Emo. Eng.	.696	.966	.034	28.72	***
COGE_01_t1	<---	Cog. Eng.	.710	1.000			
COGE_03_t1	<---	Cog. Eng.	.745	1.021	.039	25.87	***
COGE_04_t1	<---	Cog. Eng.	.803	1.155	.043	27.06	***
COGE_05_t1	<---	Cog. Eng.	.773	1.100	.038	28.98	***
COGE_06_t1	<---	Cog. Eng.	.687	1.079	.039	28.00	***
POLT_02_t1	<---	GPB	.687	1.000			
POLT_04_t1	<---	GPB	.695	1.073	.039	27.47	***
POLT_06_t1	<---	GPB	.635	1.009	.040	25.21	***
POLT_08_t1	<---	GATGA	.756	1.000			
POLT_09_t1	<---	GATGA	.751	1.031	.034	30.00	***
POLT_10_t1	<---	GATGA	.762	.999	.033	30.51	***
POLT_11_t1	<---	Pay and Pro	.907	1.000			
POLT_12_t1	<---	Pay and Pro	.882	.998	.024	41.09	***

Note. Un-stand = unstandardised; stand. = standardised; S.E. standard error; C.R = critical ratio; GPB = general political behaviour; GATGA = go along to get ahead; Emp. employee; Eng. = engagement; Phys. = physical; Emo. = emotional; Cog. = cognitive; Proc. = procedural; Dist. = distributive; Intp = interpersonal; Info = informational

3.8 Common Method Bias

Because the measurement of all variables was collected from the same individuals, using the same method, and at the same time, the observed relationships among the variables in the present study, like many other studies, may be vulnerable to common method variance. Common method variance (CMV) refers to the “variance that is attributable to the measurement method rather than to the constructs the measures represent” (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003, p. 879). Following Podsakoff et al.’s (2003) recommendations, several preventive strategies and a post hoc statistical test were carried out to address the issue of CMV.

Firstly, the order of the questions measuring the eleven latent constructs was manipulated such that the dependent variables appeared first in the questionnaire followed by the mediating and then the independent variables. Chang, Witteloostuijn, and Eden (2010) note that this strategy minimises the opportunities for respondents to cognitively develop correlations or response patterns among variables. Secondly, the organisational politics and trust in employer scales comprised negative and positive worded items. Podsakoff, Mackenzie, and Podsakoff (2012) note that balancing positive and negative items is a useful remedy as some respondents use either the positive or the negative side of the scale. Similarly, Podsakoff et al. (2003) note that the reverse score items work like a cognitive speed bumps and are likely to engage respondents in conscious thinking.

Thirdly, the cover letter and the first page of the questionnaire ensured employees that their responses would be kept confidential. In addition, branch managers and HR personnel of the banks were not asked to be involved in distributing and collecting questionnaires, in order to safeguard employees and as a

way to reduce response bias. Podsakoff et al. (2003) note that such strategies are useful to reduce common method bias, respondents' apprehension to provide candid answers, and their willingness to participate. Finally, this study used established measures comprised multiple indicator items and sound psychometric properties. Podsakoff et al. (2003) note that items' complexity and/or ambiguity may increase affectivity, leniency, and central tendency biases as such items often require respondents to develop their own idiosyncratic meanings.

Although the procedural remedies discussed above play vital role in minimising the threat of CMV, confirmatory factor analysis was performed using SEM to detect the existence of CMV in the data set. This approach has been widely applied in prior research where scholars have used a confirmatory factor analysis technique to detect CMV (e.g., Miller & Nicols, 2008; Masterson et al., 2000; Witt, Treadway, & Ferris, 2004; Zhang & Agarwal, 2009; Field, Pang, & Chiu, 2000; Witt et al., 2000; Iverson & Maguire, 2000). Podsakoff et al. (2003) note that, in prior studies, scholars have considered the confirmatory factor analysis technique as a more sophisticated technique than Harman's single-factor test to detect CMV.

This study examined the fit of the three models: (a) null model, (b), one factor model, and (c) the hypothesised 15 factor model. The null hypothesis to be tested here was that if CMV exists in the data the simple model will fit the data better than the complex models. The chi square test statistic and the goodness-of-fit indices of the null model (no underlying factors) ($\chi^2 = 80909.51$; $df = 2346$; $p = .000$; χ^2/df ratio = 34.48; SRMR = .44; IFI = .00; TLI = .00; CFI = .00; PCFI = .00; and RMSEA = .15), one factor model ($\chi^2 = 22271.44$; $df = 2277$; $p = .000$; χ^2/df ratio = 9.78; SRMR = .05; IFI = .75; TLI = .74; CFI = .75; PCFI = .72; and RMSEA = .07), and the hypothesised 15 distinct factors model ($\chi^2 = 5317.71.44$; $df = 2172$; $p =$

.000; χ^2/df ratio = 2.45; SRMR = .02; IFI = .76; TLI = .76; CFI = .76; PCFI = .89; and RMSEA = .03); and the chi square difference test between the null model and 15 factors model ($\Delta\chi^2_{(174)} = 75591.80$) and between the one factor model and 15 factors model ($\Delta\chi^2_{(105)} = 16953.73$) do not support the null hypothesis.

Following the procedure mentioned above, a single-factor test was also conducted for Time 2 data ($n = 970$). The chi square test statistic and the goodness-of-fit indices of the null model ($\chi^2 = 41790.62$; $df = 2346$; $p = .000$; χ^2/df ratio = 17.81; SRMR = .36; IFI = .00; TLI = .00; CFI = .00; PCFI = .00; and RMSEA = .13), one factor model ($\chi^2 = 14571.47$; $df = 2277$; $p = .000$; χ^2/df ratio = 6.39; SRMR = .06; IFI = .69; TLI = .68; CFI = .69; PCFI = .67; and RMSEA = .08), and the hypothesised 15 distinct factors model ($\chi^2 = 4019.31$; $df = 2172$; $p = .000$; χ^2/df ratio = 1.85; SRMR = .03; IFI = .95; TLI = .95; CFI = .95; PCFI = .88; and RMSEA = .03); and the chi square difference test between the null model and 15 factors model ($\Delta\chi^2_{(174)} = 37771.31$) and between the one factor model and 15 factors model ($\Delta\chi^2_{(105)} = 10552.16$) did not support the null hypothesis.

Among others, Mossholder, Bennet, Kemery, and Wesolowski (1998) also used the confirmatory analysis method and state that “if method variance is largely responsible for the covariation among the measures, a confirmatory factor analysis should indicate that a single (method) factor fits the data” (p. 544). Similarly, Korsgaard and Roberson (1995) used the CFA method and suggest that “if method variance is a significant problem, a simple model (e.g., single factor model) should fit the data as well as a more complex model” (p. 663).

In summary, although the procedural remedies applied at the questionnaire design and data collection stage and the confirmatory factor analysis of competing

models suggest that method bias may not be a serious threat in this study, the potential of CMV threat cannot be conclusively ruled out. It is important to note that this study took several measures to minimise the potential of CMV where possible. However, considering the specific context of this study, it was not appropriate and/or possible to apply all of them. For example, one obvious strategy to overcome the CMV problem is to obtain measures from different sources. However, Podsakoff et al. (2012) note that this approach may not be appropriate in studies where both independent and dependent variables capture beliefs, perceptions, or feelings of the same respondents. Thus, since the aim of this study was to examine employees' experiences of HIWPs, their perceptions of organisational politics and justice, and the extent to which they trust in their employer, it is worthwhile to consider who else, other than employees themselves, could be better informed of their perceptions of these constructs.

3.9 Assessment of Normality

An important assumption in structural equation modelling is that the data are multivariate normal (Byrne, 2010, p. 102). Normality in the data can be assessed by using both informal (graphical) and formal (statistical tests) methods (DeCarlo, 1997). Informal methods include the visual inspection of normal P-P plots (probability-probability), Q-Q plots (quantile-quantile), and frequency histograms, however, formal methods include statistical tests such as Kolmogorov-Smirnov test, Shapiro-Wilk test, and skew and kurtosis values of data distribution (Field, 2018).

Although, the Kolmogorov-Smirnov test and the Shapiro-Wilk test are frequently used to assess normality in the data, they are not without limitations (Field, 2018). One major limitation of these tests is that they often appear significant

in large samples, even when the data have small deviations from normality, therefore, the researcher should also plot the data to make informed decisions (Field, 2018). Moreover, Byrne (2010, p. 103) suggests that, since SEM is based on the analysis of covariance structures, evidence of kurtosis is of primary concern as kurtosis tends to impact variances and covariances.

Accordingly, histograms, normal P-P plots, skew and kurtosis values together with critical ratio values were used to analyse the structure of data distribution. The visual inspection of normal probability plots (see Appendix E) and frequency histograms (see Appendix F) indicated that while the data distribution is close to normal, it is not perfectly normal. In addition to this, skew and kurtosis values were also suggestive of moderate non-normality of data distribution. Researchers have suggested that absolute skew values greater than 2.0 and kurtosis values equal to or greater than 7.0 are indicative of moderate non-normality (Byrne' 2010; Curran, West, & Finch, 1997), however, skew values greater than 3.0 and kurtosis values greater than 10.0 indicate as serious problem. Using skew value of 2.0 and kurtosis value of 7.0 as a guide, a review of the skew and kurtosis values (see Appendix G) revealed that no item is substantially skewed or kurtotic.

Nevertheless, the presence of univariate normal distribution does not exclude the possibility of multivariate non-normal distribution. At the bottom of the kurtosis and critical ratio columns (see Appendix G) are the multivariate kurtosis and its critical ratio (C.R.) values. The C.R. values operates here as the z-statistic, thereby large positive values indicate significant positive kurtosis and large negative values indicate significant negative kurtosis (Byrne, 2010). A review of the z-statistics for each latent variable revealed that the multivariate distribution in the sample was positively kurtotic or leptokurtic. Although, skew and kurtosis values against each

observed variable generated by AMOS are presented in Appendix G, Table 18 shows the skew and kurtosis values for each latent variable calculated using SPSS functionality.

Table 18
Descriptive Statistics, Skewness, Kurtosis, and Z-Statistics of Latent Variables

			<u>Skew</u>		<u>Kurtosis</u>	
	Mean	SD	Skew	Z-Skew	Kurtosis	Z-Kurtosis
Trust in employer	3.50	0.74	-.449	-7.24	-.276	-2.22
Employee engagement	3.49	0.62	-.445	-7.17	-.120	-0.96
Organisational politics	2.52	0.74	.397	6.40	-.497	-4.00
Procedural justice	3.36	0.75	-.773	-12.46	.217	1.75
Distributive justice	3.29	0.86	-.705	-11.37	.135	1.08
Interpersonal justice	3.86	0.75	-.884	-14.25	.911	7.34
Informational justice	3.34	0.78	-.689	-11.11	-.063	-0.50
Power	3.36	0.78	-.630	-10.16	-.063	-0.50
Information	3.31	0.74	-.543	-8.75	-.327	-2.63
Reward	3.29	0.78	-.608	-9.80	-.190	-1.53
Knowledge	3.45	0.69	-.459	-7.40	-.515	-4.15

Note. The z-values are derived from dividing the statistics by the appropriate standards errors of .062 (skewness) and .124 (kurtosis).

3.10 Testing for Homogeneity of Variance

Levene's test was carried out to test homogeneity of variances of dependent variables between male and female respondents. Levene's test tests the assumption that variances in two or more than two groups are equal (Field, 2018). If the Levene's test is non-significant at $p \geq .05$, then the null hypothesis that the variances

in different groups are roughly equal is accepted (Field, 2018). Table 19 shows the Levene's test statistics and variances of dependent and mediating variables. The test results show that the assumption of homogeneity has not been violated.

Table 19
Test of Homogeneity of Variance between Male and Female Respondents

Variable	Variance Male	Variance Female	Levene Statistic	DF1	DF2	Sig.
Trust in Employer	.555	.553	.063	1	1552	.802
Employee Engagement	.341	.315	.460	1	1552	.498
Organisational Politics	.540	.512	.005	1	1552	.942
Procedural Justice	.565	.563	.021	1	1552	.884
Distributive Justice	.749	.748	.020	1	1552	.887
Interpersonal Justice	.582	.531	.927	1	1552	.336
Informational Justice	.615	.624	.628	1	1552	.428

Note. Levene statistic is based on mean; DF = degrees of freedom

3.11 Assessment of Multicollinearity

One simple way to identify multicollinearity is to scan a correlation matrix of all variables. Correlations greater than .90 suggest that the two variables are highly correlated and only one of the two should be included in the analysis (Kline, 2011; Field, 2018). Moreover, other methods to detect collinearity include the variance inflation factor (VIF) and, related to the VIF, is the tolerance statistic. The VIF value ≥ 10 , and tolerance statistic < 0.1 indicate a problem of extreme multicollinearity (Field, 2018; Kline, 2011). As shown in Table 20, the VIF values are all well below 10 and the tolerance statistics are all well above 0.1, indicate that multicollinearity was not an issue in the sample data.

Table 20
Multicollinearity Test of the Independent Variables

	<u>Collinearity Statistics</u>	
	<u>Tolerance</u>	<u>VIF</u>
Power	.44	2.23
Information	.42	2.36
Reward	.39	2.54
Knowledge	.40	2.45

Note. VIF = variance inflation factor; Dependent Variables: and employee engagement

Table 21 shows the means, standard deviations, and zero-order correlations among the variables examined in the present study, with coefficient alphas presented on the diagonal in the parentheses. Most notable are the correlations between the two dimensions of organisational politics (general political behaviour and go along to get ahead), between the information factor of HIWPs and procedural justice, and between the knowledge factor of HIWPs and procedural justice. However, all correlations were in the proposed direction. The PIRK variable were negatively correlated with employees' perceptions of organisational politics and positively correlated with all four justice dimensions. Whereas organisational politics was negatively related with dependent variables. The correlations between interpersonal justice and all other variables of the study were very low. The scale reliability for all the variables used in the present study was reasonably good as shown by the Cronbach alpha values.

Table 21
Descriptive Statistics, Cronbach α 's, and Correlations

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Power	3.36	.78	(.95)										
2. Information	3.31	.74	.60	(.93)									
3. Rewards	3.29	.78	.71	.63	(.95)								
4. Knowledge	3.45	.69	.60	.71	.66	(.92)							
5. Politics	2.53	.73	-.71	-.71	-.69	-.75	(.93)						
6. Procedural Justice	3.36	.75	.69	.76	.73	.77	-.76	(.91)					
7. Distributive Justice	3.29	.86	.72	.61	.64	.56	-.66	.62	(.93)				
8. Interpersonal Justice	3.86	.75	.31	.35	.35	.39	-.46	.36	.30	(.83)			
9. Informational Justice	3.34	.78	.65	.70	.72	.71	-.75	.76	.64	.35	(.88)		
10. Trust in employer	3.50	.74	.65	.68	.64	.67	-.68	.69	.60	.37	.67	(.87)	
11. Employee Engagement	3.49	.57	.75	.76	.74	.77	-.84	.81	.68	.41	.75	.77	(.94)

Note. $n = 1554$; all correlations are significant at $p < .01$; SD = standard deviation; values in the parenthesis are coefficient alphas; one tailed.

CHAPTER 4: CROSS-SECTIONAL DATA ANALYSIS

4.1 Structural Models

Using the final measurement model (see Figure 7, Chapter 3), three different structural models were developed and analysed: (1) a direct effects model, (2) a partial mediation model, and (3) a full mediation model. In all three structural models, the four PIRK variables (power, information, reward, and knowledge) were correlated with each other. Following Preacher and Hayes (2008) recommendations, the error terms associated with all five mediating variables were also correlated with each other. Similarly, the error terms of employee engagement and trust in employer were also correlated. As in all measurement and structural models, gender, age, and experience were included as control variables. However, the inclusion of these control variables did not improve the fit of the models and they were not significantly related to any endogenous variable, therefore, they were deleted in subsequent analyses.

In the partial mediation model, the regression paths were specified leading (a) from the four independent variables (power, information, reward, and knowledge) to the five mediating variables (organisational politics, procedural, distributive, interpersonal, and informational justice), (b) from the five mediating variables to the two dependent variables (employee engagement and trust in employer), and (c) from the four independent variables to the two dependent variables. The goodness-of-fit statistics related to the partial mediation model revealed that the model fits the data very well ($\chi^2 = 5536.45$; $df = 2216$; $p = .000$; χ^2/df ratio = 2.50; SRMR = .03; IFI = .96; TLI = .96; CFI = .96; PCFI = .91; and RMSEA = .03).

In the full mediation model, all regression paths were retained as the partial mediation model, however, the eight paths leading from the four PIRK variables to employee engagement and trust in employer were deleted. The goodness-of-fit statistics related to the full mediation model revealed that this model also fits the data very well ($\chi^2 = 5651.63$; $df = 2224$; $p = .000$; χ^2/df ratio = 2.54; SRMR = .03; IFI = .96; TLI = .95; CFI = .96; PCFI = .91; and RMSEA = .03). However, the full mediation model was slightly less well fitting than the partial mediation model.

In the direct effects model, all regression paths were retained as the partial mediation model, however, the 10 regression paths leading from organisational justice and politics to engagement and trust were deleted. Deleting regression paths from mediating variables to dependent variables resulted in a model that estimates only the direct effects of the independent variables on the dependent variables. The goodness-of-fit statistics related to the direct effects model revealed that this model also fits the data very well ($\chi^2 = 5725.71$; $df = 2226$; $p = .000$; χ^2/df ratio = 2.57; SRMR = .03; IFI = .96; TLI = .95; CFI = .96; PCFI = .91; and RMSEA = .03). However, the direct effects model was slightly less well fitting than both the partial mediation model and the full mediation model. Table 22 shows the comparison of goodness-of-fit indices and chi-square difference test to compare the fit of three models tested here.

Based on the chi square test of model fit and the goodness-of-fit indices (see Table 22), the partial mediation model was retained to test the hypotheses because, statistically, it was the best fitting model to the data. Figure 8 shows the complete diagram of the partial mediation model. The left side shows the four PIRK variables correlated with each other. In the middle part of the diagram are the five mediating variables (organisational politics and four justice dimensions) with residual terms

correlated with each other. The right side of the diagram shows the two dependent variables (trust in employer and employee engagement) with error terms also correlated. Each single headed arrow moving from the independent variables to the mediator variables and dependent variables, and from the mediator variables to the dependent variables is a regression path to be estimated.

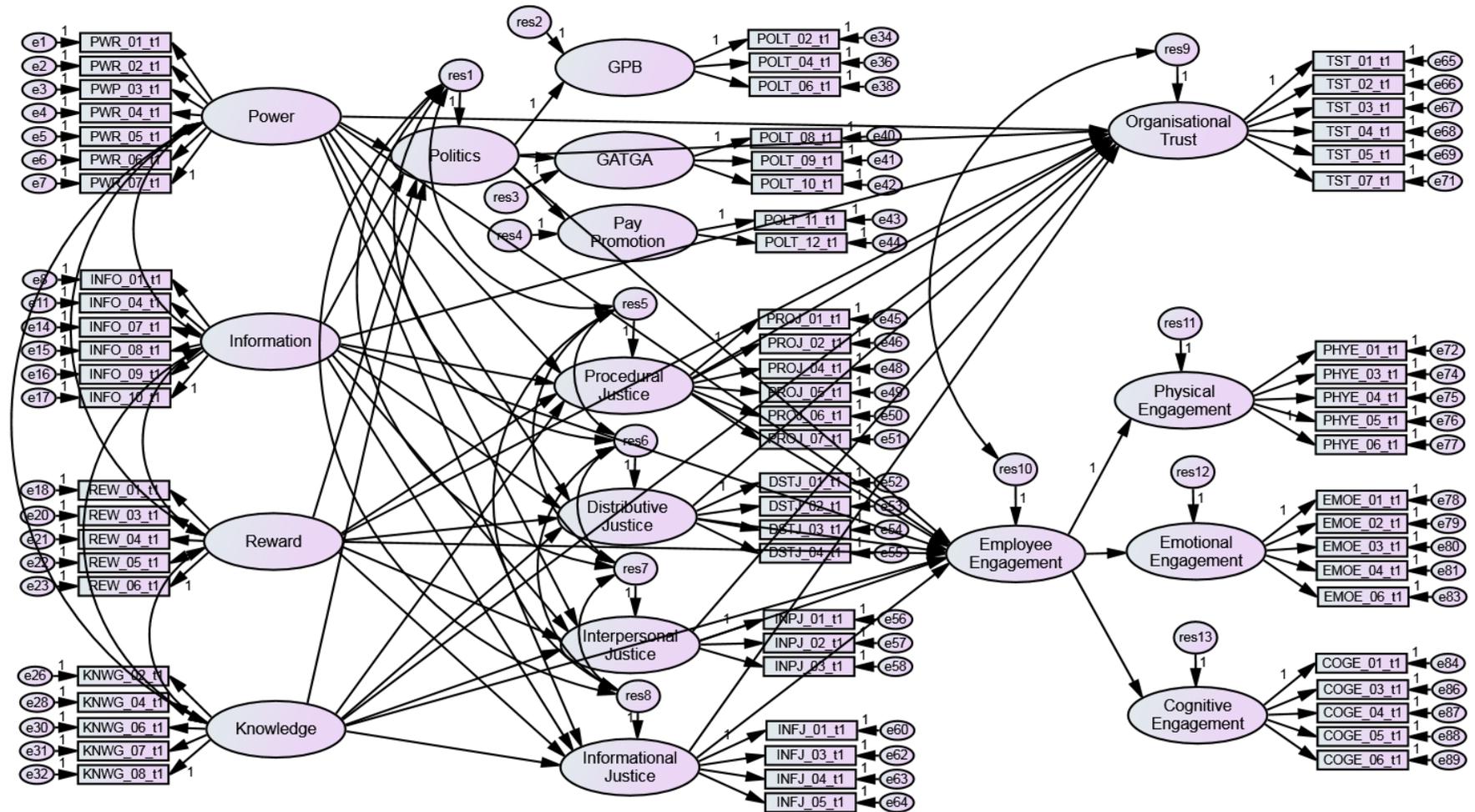


Figure 8. Partial mediation model with all paths estimated in the study.

Table 22
Comparison of Fit Statistics of Alternative Structural Models of Time 1 Data

Model	Model fit indices									Model differences			
	χ^2	<i>df</i>	χ^2/df	SRMR	IFI	TLI	CFI	PCFI	RMSEA (CI)	$\Delta\chi^2$	Δdf	p	Details
1. Partial mediation model	5536.4	2216	2.50	.03	.96	.96	.96	.91	.03 (.030, .032)				
2. Full mediation model	5651.6	2224	2.54	.03	.96	.95	.96	.91	.03 (.030, .033)	115.2	8	0.00	Model 1 to 2
3. Direct effect model	5725.7	2226	2.57	.03	.96	.95	.96	.91	.03 (.031, .033)	189.3	10	0.00	Model 1 to 3

4.2 Hypotheses Testing

As stated in Chapter 1, the principal research question in this study was to explore how HIWPs influence employee attitudes and behaviours (employee engagement and trust in employer). Accordingly, the partial mediation model shown in Figure 8 tests: (a) the effects of HIWPs on employee engagement and trust in employer, (b) the effects of HIWPs on employees' perceptions of organisational justice and organisational politics, (c) the effects of perceptions of organisational justice and politics on employee engagement and trust in employer, and (d) the mediating role of perceptions of organisational justice and organisational politics in the relationships between HIWPs and employee engagement and trust in employer. Together, these relationships result in 20 hypotheses which are as follows:

Hypotheses 1: HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Employee Engagement.

Hypotheses 2: HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Trust in employer.

Hypotheses 3: HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Distributive Justice.

Hypotheses 4: HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Procedural Justice.

Hypotheses 5: HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Interpersonal Justice.

Hypotheses 6: HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Informational Justice.

Hypotheses 7: HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be negatively related to Organisational Politics.

Hypotheses 8: Organisational Justice dimensions [(a) Procedural, (b) Distributive, (c) Interpersonal, and (d) Informational] will be positively related to Employee Engagement.

Hypotheses 9: Organisational Justice dimensions [(a) Procedural, (b) Distributive, (c) Interpersonal, and (d) Informational] will be positively related to Trust in employer.

Hypotheses 10: Organisational Politics will be negatively related to [(a) Employee Engagement and (b) Trust in Employer].

Hypotheses 11: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Employee Engagement will be mediated by Distributed Justice.

Hypotheses 12: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Employee Engagement will be mediated by Procedural Justice.

Hypotheses 13: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Employee Engagement will be mediated by Interpersonal Justice.

Hypotheses 14: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Employee Engagement will be mediated by Informational Justice.

Hypotheses 15: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Employee Engagement will be mediated by Organisational Politics.

Hypotheses 16: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Trust in Employer will be mediated by Distributive Justice.

Hypotheses 17: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Trust in Employer will be mediated by Procedural Justice.

Hypotheses 18: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Trust in Employer will be mediated by Interpersonal Justice.

Hypotheses 19: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Trust in Employer will be mediated by Informational Justice.

Hypotheses 20: The effect of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Trust in Employer will be mediated by Organisational Politics.

Please note that hypotheses 1 to 10 are the direct effects hypotheses, whereas hypotheses 11 to 20 are the indirect (mediated) effects hypotheses. The direct effects hypotheses were tested by following the standard procedures in SPSS AMOS, however, testing indirect (mediated) hypotheses in a multiple mediator models required additional statistical processes which are discussed below.

4.3 Mediation Analysis Strategy

The existence of mediation, hypothesising that the indirect effect is statistically different from zero, was tested by comparing the goodness-of-fit statistics of the partial mediation model with both the full mediation model and the direct effects model. The chi square statistic of model fit (see Table 22) indicates that the partial mediation model (see Figure 8) fits the data better than the full mediation model and the direct effects model. However, the goodness-of-fit statistics do not inform about the size and the significance level of indirect (mediated) as well as the

total effects. Therefore, in addition to chi square statistic, two methods were also used: (a) biased-corrected (BC) bootstrap method and (b) the “product of coefficient” approach with Sobel (1982) test.

Firstly, the BC bootstrap method was used because the standard AMOS output (without bootstrapping) does not provide the significance level of *total indirect effect* of the independent variable on the dependent variable through multiple mediators. Kline (2011) notes that “I am unaware of a hand-calculable test of the statistical significance of indirect effects through two or more mediators”, however, if all unstandardised path coefficients are significant at the same level of alpha (α) such as .01, then only the total indirect effect can be taken as statistically significant at the same α -level (p. 165).

In addition, other authors suggest that the BC bootstrap method provides a more accurate test of mediation and the least biased confidence intervals (Williams & MacKinnon, 2008; Taylor, MacKinnon, & Tein, 2008; MacKinnon, Lockwood, & Williams, 2004). Similarly, Williams, Vandenberg, and Edwards (2009) developed a set of recommendations to improve applications of SEM in future research and they suggest the use of the bootstrap to test mediated effects in latent variables models. Therefore, the partial mediation model shown in Figure 8 was run using 5,000 bootstrap samples.

Secondly, the “product of coefficients” approach (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002) was used to decompose the *total indirect effect* into the *specific indirect effect*. The total indirect effect reflects the effect of the independent variable on the dependent variable through all the mediating variables included in the structural model, whereas, the specific indirect effect reflects the effect of the independent variable on the dependent variable through a single

mediator. Preacher and Hayes (2008) note that a specific indirect effect through a particular mediator in the context of multiple mediation is not the same as the indirect effect through that particular mediator alone because collinearity plays a significant role in multiple mediation models. In other words, the indirect effect of a variable in the presence of multiple mediating variables could be either high or low than if modelled alone. They note that examining both the total indirect effect and the specific indirect effect is important because the total indirect effect through multiple mediator variables provides information regarding the whole model, however, the specific indirect effect through each mediating variable provides detailed insights as to which mediating variable plays a significant role in the relationship between the independent variable and the dependent variable (Preacher & Hayes, 2008).

Following MacKinnon et al.'s (2002) guidelines, "path a" coefficient was multiplied with "path b" coefficient, where "path a" is the direct effect of the independent variable on the mediating variable and "path b" is the direct effect of the mediating variable on the dependent variable. The resulting product of $a \times b$ shows the specific indirect effect of the independent variable on the dependent variable through that particular mediating variable. The online Sobel test calculator (<http://quantpsy.org/sobel/sobel.htm>) was used to test the significance level of the specific indirect effect. The unstandardised regression coefficients for "path a" and "path b" and the standard errors for "path a" and path b" were used as inputs in the Sobel test calculator to compute the significance level of specific indirect effect.

Table 23 shows the direct effects of HIWPs (PIRK variables) on the dependent variables (trust in employer, and employee engagement), the mediating variables (organisational politics, and organisational justice dimensions), and the

indirect and total effects of HIWPs on the dependent variables through multiple mediators.

Table 23
Direct, Indirect, and the Unstandardised Estimates of the Total effects, and r^2 Values

	Direct effects	Indirect effects	Total effects
Power			
Trust in Employer	.22***	.06	.28***
Employee engagement	.11***	.11***	.22***
Organisational politics	-.27***	—	—
Procedural justice	.14***	—	—
Distributive justice	.56***	—	—
Interpersonal justice	.03	—	—
Informational justice	.12***	—	—
Information			
Trust in Employer	.23***	.08*	.31***
Employee engagement	.11***	.11***	.22***
Organisational politics	-.21***	—	—
Procedural justice	.29***	—	—
Distributive justice	.23***	—	—
Interpersonal justice	.06	—	—
Informational justice	.25***	—	—
Reward			
Trust in Employer	-.02	.07*	.05
Employee engagement	.06***	.05*	.11***
Organisational politics	-.09***	—	—
Procedural justice	.19***	—	—
Distributive justice	.16***	—	—
Interpersonal justice	.10**	—	—
Informational justice	.27***	—	—
Knowledge			
Trust in Employer	.17***	.08	.25***
Employee engagement	.07**	.15***	.22***
Organisational politics	-.36***	—	—
Procedural justice	.29***	—	—
Distributive justice	.02	—	—
Interpersonal justice	.24***	—	—
Informational justice	.23***	—	—
Organisational Politics			
Trust in Employer	-.03		
Employee Engagement	-.30***		
Procedural Justice			
Trust in Employer	.07		
Employee Engagement	.15***		

(continued)

Table 23 (continued)
 Direct, Indirect, and Total Effects Unstandardised Estimates and r^2 Values

	Direct effects	Indirect effects	Total effects
Distributive Justice			
Trust in Employer	.04		
Employee Engagement	.01		
Interpersonal justice			
Trust in Employer	.05*		
Employee Engagement	-.00		
Informational Justice			
Trust in Employer	.16**		
Employee Engagement	-.01		
r^2 Values			
	Organisational Politics		.77
	Procedural Justice		.84
	Distributive Justice		.63
	Interpersonal Justice		.19
	Informational Justice		.76
	Trust in Employer		.69
	Employee Engagement		.97

Note. Direct and indirect effects are unstandardised estimates based on a bootstrap sample of 5000; — dashes indicate data are not applicable; * $p < .05$, ** $p < .01$, *** $p < .001$.

As shown in Table 23, the amount of total variance explained (R^2) by the model are as followings: organisational politics ($R^2 = .77$), procedural justice ($R^2 = .84$), distributive justice ($R^2 = .63$), informational justice ($R^2 = .76$), trust in employer, ($R^2 = .69$), and employee engagement ($R^2 = .97$), and interpersonal justice ($R^2 = .19$). The R^2 value for employee engagement ($R^2 = .97$) may be too high as previous studies (e.g., Saks, 2006) have identified some other factors (e.g., perceived organisational and supervisor support) that can predict employee engagement, but not included in the current study. To determine the causes of unusual value of R^2 , many alternative models using the sequential regression methods (Hair et al., 2016)

were tested in which the effects of PIRK variables were controlled by including only one PIRK variable at one time in the model and by removing the correlations among PIRK variables as well as between organisational politics and organisational justice dimensions.

In all alternative models tested to detect reasons for high R^2 value of employee engagement, there was a slight decrease in R^2 values for all endogenous variables, however, a substantial decrease was observed when the PIRK variables were not allowed to covary but organisational politics and organisational justice dimensions were allowed to covary. The results of this model were as follows: organisational politics $R^2 = .60$ ($\Delta R^2 = .17$), procedural justice $R^2 = .68$ ($\Delta R^2 = .16$), distributive justice $R^2 = .47$ ($\Delta R^2 = .16$), informational justice $R^2 = .56$ ($\Delta R^2 = .20$), trust in employer, $R^2 = .47$ ($\Delta R^2 = .22$), employee engagement $R^2 = .87$ ($\Delta R^2 = .10$), and interpersonal justice $R^2 = .10$ ($\Delta R^2 = .09$). In summary, there can be multiple reasons behind high R^2 values, however, one major reason could be the number of variables included in the model, the large sample size, and the complex interaction between the multiple variables and the sample size (Yin & Fan, 2001). A drop in R^2 when PIRK variables were not allowed to covary may be suggestive of the theory that these four PIRK variables have synergies and should be implemented simultaneously (Lawler, 1986; Boxall & Macky, 2009; Wood & Wall, 2007; Vandenberg et al., 1999).

4.4 Testing the Direct Effect Hypotheses (1 to 10)

Hypotheses 1 (1a, 1b, 1c, and 1d) predicted that *HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Employee Engagement*. As Table 23 shows, all four PIRK variables, power ($b = .11$, $p < .001$),

information ($b = 11, p < .001$) rewards ($b = .06, p < .001$), and knowledge ($b = .07, p < .01$) were significantly related to employee engagement. Therefore, hypotheses 1a, 1b, 1c, and 1d were fully supported.

Hypotheses 2 (2a, 2b, 2c, and 2d) predicted that *HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Trust in Employer*. As Table 23 shows, three out of four PIRK variables, power ($b = .22, p < .001$), information ($b = .23, p < .001$), and knowledge ($b = .17, p < .01$) were significantly related to trust in employer, however, rewards did not have significant relationship ($b = -.02, p < .612$) with trust in employer. Therefore, hypotheses 2a, 2b, and 2d were supported, however, hypothesis 2c which is the effect of rewards on trust in employer was not supported.

Hypotheses 3 (3a, 3b, 3c, and 3d) predicted that *HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Distributive Justice*. As Table 23 shows, three PIRK variables, power ($b = .56, p < .001$), information ($b = .23, p < .001$), and rewards ($b = .16, p < .001$) were significantly related to distributive justice, thus supporting hypotheses 3a, 3b, and 3c. However, employees' experiences of knowledge practices ($b = .02, p < .666$) were not significantly related to their perceptions of distributive justice. Therefore, hypothesis 3d was not supported.

Hypotheses 4 (4a, 4b, 4c, and 4d) predicted that *HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be positively related to Procedural Justice*. As Table 23 shows, all four PIRK variables, power ($b = .14, p < .001$), information ($b = .29, p < .001$), rewards ($b = .19, p < .001$), and knowledge ($b = .29, p < .001$), were significantly related to employees' perceptions of procedural justice, thus supporting hypotheses 4a, 4b, 4c, and 4d.

Hypotheses 5 (5a, 5b, 5c, and 5d) predicted that *HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge]* will be positively related to *Interpersonal Justice*. As Table 23 shows, employees' experiences of rewards ($b = .10, p < .01$) and knowledge ($b = .24, p < .001$) were significantly related to their perceptions of interpersonal justice, thus supporting hypothesis 5c and 5d. However, as shown in Table 23, employees' experiences of power ($b = .03, p < .451$), and information ($b = .06, p < .118$) practices were not significantly related to their perceptions of interpersonal justice, therefore, hypotheses 5a and 5b were not supported.

Hypotheses 6 (6a, 6b, 6c, and 6d) predicted that *HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge]* will be positively related to *Informational Justice*. As Table 23 shows, employees' experiences of all four PIRK variables, power ($b = .12, p < .001$), information ($b = .25, p < .001$), rewards ($b = .27, p < .001$), and knowledge ($b = .23, p < .001$), were significantly related to employees' perceptions of informational justice, therefore, hypotheses 6a, 6b, 6c, and 6d were supported.

Hypotheses 7 (7a, 7b, 7c, and 7d) predicted that *HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge]* will be negatively related to *Organisational Politics*. As Table 23 shows, employees' experiences of power ($b = -.27, p < .001$), information ($b = -.21, p < .001$), rewards ($b = -.09, p < .001$), and knowledge ($b = -.36, p < .001$) practices were significantly negatively related to their perceptions of organisational politics. Therefore, all four hypotheses 7a, 7b, 7c, and 7d were supported.

Hypotheses 8 (8a, 8b, 8c, and 8d) predicted that *Organisational Justice dimensions [(a) Distributive, (b) Procedural, (c) Interpersonal, and (d) Informational]* will be positively related to *Employee Engagement*. As Table 23 shows, employees' perceptions of procedural justice ($b = .15, p < .001$) were significantly related to employee engagement, thus supporting hypothesis 8b. However, employees' perceptions of distributive justice ($b = .01, p < .480$), interpersonal justice ($b = -.00, p < .646$), and informational justice ($b = -.01, p < .673$) were not significantly related to employee engagement, thus hypotheses 8a, 8c, and 8d were not supported. In summary, procedural justice was the only dimension of organisational justice that has significant relationship with employee engagement.

Hypotheses 9 (9a, 9b, 9c, and 9d) predicted that *Organisational Justice dimensions [(a) Distributive, (b) Procedural, (c) Interpersonal, and (d) Informational]* will be positively related to *Trust in employer*. As Table 23 shows, employees' perceptions of interpersonal justice ($b = .05, p < .050$) and informational justice ($b = .06, p < .006$) were significantly related to trust in their employer thus hypotheses 9c and 9d were supported. However, employees' perceptions of procedural justice ($b = .07, p < .327$) and distributive justice ($b = .04, p < .141$) were not significantly related to trust in their employer, thus hypotheses 9a and 9b were not supported.

Hypothesis 10 (10a and 10b) predicted that *Organisational Politics will be negatively related to Employee Engagement and Trust in Employer*. As Table 23 shows, employees' perceptions of organisational politics ($b = -.30, p < .001$) were significantly negatively related to employee engagement, thus supporting hypothesis 10a. However, employees' perceptions of organisational politics ($b = -.03, p < .604$)

were not significantly related to employees' trust in their employer, thus hypotheses 10b was not supported.

Table 24

Direct, Indirect, and Total effects of the Independent Variables (IV) on Dependent Variables (DV) through each Mediating Variable

Independent variable	Path a →	Mediating variable	Path b →	Dependent variable	Indirect effect a × b	Direct effect c'	Total effect c = c' + ab
Power	-.27***	Org. Politics	-.03	Trust in employer	.008 (.599)	.22***	.22
Power	.14***	Pro. Justice	.07	Trust in employer	.009 (.249)	.22***	.22
Power	.56***	Dist. Justice	.04	Trust in employer	.022 (.505)	.22***	.24
Power	.03	Intp. Justice	.05*	Trust in employer	.001(.198)	.22***	.22
Power	.12***	Info. Justice	.16**	Trust in employer	.019 (.004)	.22***	.24
Information	-.21***	Org. Politics	-.03	Trust in employer	.006 (.549)	.23***	.23
Information	.29***	Pro. Justice	.07	Trust in employer	.020 (.244)	.23***	.25
Information	.23***	Dist. Justice	.04	Trust in employer	.009 (.506)	.23***	.23
Information	.06	Intp. Justice	.05*	Trust in employer	.003 (.185)	.23***	.23
Information	.25***	Info. Justice	.16**	Trust in employer	.040 (.001)	.23***	.27
Reward	-.09***	Org. Politics	-.03	Trust in employer	.002 (.522)	-.01	-.00
Reward	.19***	Pro. Justice	.07	Trust in employer	.013 (.246)	-.01	.00
Reward	.16***	Dist. Justice	.04	Trust in employer	.006 (.508)	-.01	-.00
Reward	.10**	Intp. Justice	.05*	Trust in employer	.005 (.045)	-.01	-.00
Reward	.27***	Info. Justice	.16**	Trust in employer	.043 (.001)	-.01	.03
Knowledge	-.36***	Org. Politics	-.03	Trust in employer	.010 (.549)	.17***	.18
Knowledge	.29***	Pro. Justice	.07	Trust in employer	.020 (.244)	.17***	.19
Knowledge	.02	Dist. Justice	.04	Trust in employer	.000 (.527)	.17***	.17
Knowledge	.24***	Intp. Justice	.05*	Trust in employer	.012 (.021)	.17***	.18
Knowledge	.23***	Info. Justice	.16**	Trust in employer	.036 (.003)	.17***	.21

Table 24 (continued)

Independent variable	Path a →	Mediating variable	Path b →	Dependent variable	Indirect effect (a × b)	Direct effect IV to DV (c')	Total effect c = c' + ab
Power	-.27***	Org. Politics	-.30***	Emp. Engagement	.081 (.000)	.11***	.19
Power	.14***	Pro. Justice	.15***	Emp. Engagement	.021 (.000)	.11***	.13
Power	.56***	Dist. Justice	.01	Emp. Engagement	.005 (.381)	.11***	.11
Power	.03	Intp. Justice	-.00	Emp. Engagement	-.000 (.677)	.11***	.11
Power	.12***	Info. Justice	-.01	Emp. Engagement	-.000 (.739)	.11***	.11
Information	-.21***	Org. Politics	-.30***	Emp. Engagement	.063 (.000)	.11***	.17
Information	.29***	Pro. Justice	.15***	Emp. Engagement	.043 (.000)	.11***	.15
Information	.23***	Dist. Justice	.01	Emp. Engagement	.002 (.321)	.11***	.11
Information	.06	Intp. Justice	-.00	Emp. Engagement	-.000 (.634)	.11***	.11
Information	.25***	Info. Justice	-.01	Emp. Engagement	-.002 (.738)	.11***	.11
Reward	-.09***	Org. Politics	-.30***	Emp. Engagement	.027 (.000)	.06***	.09
Reward	.19***	Pro. Justice	.15***	Emp. Engagement	.028 (.000)	.06***	.09
Reward	.16***	Dist. Justice	.01	Emp. Engagement	.000 (.325)	.06***	.06
Reward	.10**	Intp. Justice	-.00	Emp. Engagement	.000 (.623)	.06***	.06
Reward	.27***	Info. Justice	-.01	Emp. Engagement	-.002 (.738)	.06***	.06
Knowledge	-.36***	Org. Politics	-.30***	Emp. Engagement	.108 (.000)	.07**	.18
Knowledge	.29***	Pro. Justice	.15***	Emp. Engagement	.043 (.000)	.07**	.11
Knowledge	.02	Dist. Justice	.01	Emp. Engagement	.000 (.579)	.07**	.07
Knowledge	.24***	Intp. Justice	-.00	Emp. Engagement	.000 (.618)	.07**	.07
Knowledge	.23***	Info. Justice	-.01	Emp. Engagement	-.002 (.317)	.07**	.07

Note. * $p < .05$, ** $p < .01$, *** $p < .001$; p values for indirect effects are shown in parentheses

4.5 Testing the Indirect Effect through Individual Mediator (Hypo. 11 to 20)

Table 24 shows the indirect (mediated) effect of each PIRK variable on employee engagement and trust in employer through each mediator included in the structural model. As mentioned before, these indirect effects were decomposed using MacKinnon et al.'s (2002) product of coefficient approach. The online Sobel test calculator (<http://quantpsy.org/sobel/sobel.htm>) was used to estimate the significance level of the indirect effect through each mediator. The total effect of each PIRK variable on trust in employer and employee engagement is the sum of the direct effect and the indirect effect.

Hypotheses 11 (11a, 11b, 11c, and 11d) predicted that *the effects of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Employee Engagement will be mediated by Distributive Justice*. As shown in Table 24, the indirect effects of employees' experiences of power ($b = .00, p < .381$), information ($b = .00, p < .321$), rewards ($b = .00, p < .325$), and knowledge ($b = .00, p < .579$) through distributive justice were not significantly related to employee engagement. Therefore, hypotheses 11a, 11b, 11c, and 11d were not supported. In other words, employees' perceptions of distributive justice did not play a mediating role in the relationships between HIWPs and employee engagement.

Hypotheses 12 (12a, 12b, 12c, and 12d) predicted that *the effects of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Employee Engagement will be mediated by Procedural Justice*. As shown in Table 24, the indirect effects of employees' experiences of power ($b = .02, p < .001$), information ($b = .04, p < .001$), rewards ($b = .03, p < .001$), and knowledge ($b = .04, p < .001$)

through procedural justice were significantly related to employee engagement. Therefore, hypotheses 12a, 12b, 12c, and 12d were supported.

Hypotheses 13 (13a, 13b, 13c, and 13d) predicted that *the effects of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Employee Engagement will be mediated by Interpersonal Justice*. Table 24 shows that the indirect effects of employees' experiences of power ($b = -.00, p < .677$), information ($b = -.00, p < .634$), rewards ($b = .00, p < .623$), and knowledge ($b = .00, p < .618$) through perceptions of interpersonal justice were not significantly related to employee engagement. Therefore, hypotheses 13a, 13b, 13c, and 13d were not supported. In other words, employees' perceptions of interpersonal justice did not play a mediating role in the relationship between HIWPs and employee engagement.

Hypotheses 14 (14a, 14b, 14c, and 14d) predicted that *the effects of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Employee Engagement will be mediated by Informational Justice*. Table 24 shows that the indirect effects of employees' experiences of power ($b = -.00, p < .739$), information ($b = -.00, p < .738$), rewards ($b = .00, p < .738$), and knowledge ($b = .00, p < .317$) through perceptions of informational justice were not significantly related to employee engagement. Therefore, hypotheses 14a, 14b, 14c, and 14d were not supported. In other words, employees' perceptions of informational justice did not play a mediating role in the relationship between HIWPs and employee engagement.

Hypotheses 15 (15a, 15b, 15c, and 15d) predicted that *the effects of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Employee Engagement will be mediated by Organisational Politics*. Table 24 shows that the indirect effects of employees' experiences of power ($b = .08, p < .001$), information

($b = .06, p < .001$), rewards ($b = .03, p < .001$), and knowledge ($b = .11, p < .001$) practices through organisational politics were significantly related to employee engagement. Therefore, hypotheses 15a, 15b, 15c, and 15d were supported. In other words, employees' perceptions of organisational politics play a significant mediating role in the relationship between HIWPs and employee engagement.

Hypotheses 16 (16a, 16b, 16c, and 16d) predicted that *the effects of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Trust in Employer will be mediated by Distributive Justice*. Table 24 shows that the indirect effects of employees' experiences of power ($b = .02, p < .505$), information ($b = .00, p < .506$), rewards ($b = .01, p < .508$), and knowledge ($b = .00, p < .527$) through distributive justice were not significantly related trust in employer. Therefore, hypotheses 16a, 16b, 16c, and 16d were not supported. In other words, employees' perceptions of distributive justice did not play a mediating role in the relationship between HIWPs and trust in employer.

Hypotheses 17 (17a, 17b, 17c, and 17d) predicted that *the effects of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Trust in Employer will be mediated by Procedural Justice*. Table 24 shows that the indirect effects of employees' experiences of power ($b = .00, p < .249$), information ($b = .00, p < .244$), rewards ($b = .01, p < .246$), and knowledge ($b = .02, p < .244$) through procedural justice are not significantly related to trust in employer. Therefore, hypotheses 17a, 17b, 17c, and 17d were not supported. In other words, employees' perceptions of procedural justice do not play a mediating role in the relationship between HIWPs and trust in employer.

Hypotheses 18 (18a, 18b, 18c, and 18d) predicted that *the effects of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Trust in Employer will be mediated by Interpersonal Justice*. Table 24 shows that the indirect effects of employees' experiences of informational ($b = .005, p < .045$) and knowledge ($b = .012, p < .021$) practices were significantly related to trust in employer through interpersonal justice, thus supporting hypotheses 18c and 18d, however, the effect sizes are too small to be considered valuable. Hypotheses 18a and 18b were not supported at all as the effects of power ($b = .001, p < .198$) and information ($b = .003, p < .185$) on trust in employer through interpersonal justice were not statistically significant. In other words, interpersonal justice perceptions did not mediate the relationship between HIWPs and trust in employer.

Hypotheses 19 (19a, 19b, 19c, and 19d) predicted that *the effects of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Trust in Employer will be mediated by Informational Justice*. Table 24 shows that the indirect effects of employees' experiences of power ($b = .02, p < .004$), information ($b = .04, p < .001$), rewards ($b = .04, p < .001$), and knowledge ($b = .04, p < .003$) practices are significantly related to trust in employer through perceptions of informational justice. Therefore, hypotheses 19a, 19b, 19c, and 19d were supported. In other words, employees' perceptions of informational justice play a significant mediating role in the relationship between HIWPs and trust in employer. In summary, informational justice is the only dimension of organisational justice that plays a significant mediating role in the relationships between HIWPs and trust in employer.

Hypotheses 20 (20a, 20b, 20c, and 20d) predicted that *the effects of HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] on Trust in Employer will be mediated by Organisational Politics*. Table 24 shows that the indirect effects

of employees' experiences of power ($b = .008, p < .599$), information ($b = .006, p < .549$), rewards, ($b = .002, p < .522$), and knowledge ($b = .010, p < .549$), through organisational politics, are not significantly related to trust in employer. Therefore, hypotheses 20a, 20b, 20c, and 20d were not supported. In other words, employees' perceptions of organisational politics did not mediate the relationships between HIWPs and trust in employer.

In summary, it was originally conceived that the four PIRK variables would be positively associated with employee engagement and trust in employer as well as employees' perceptions of organisational politics, and that all four justice dimensions would mediate the relationship of the four PIRK variables with employee engagement and trust in employer. The results presented above partially supported the mediation model tested using the structural equation modelling. Particularly, the results suggest that the four PIRK variables have the potential to foster employee engagement and trust in employer, lower the perceptions of organisational politics, and enhance the perceptions of organisational justice.

Regarding mediation, the results suggest that perceptions of organisational politics and procedural justice can mediate the relationship between the four PIRK variable and engagement, whereas, interpersonal and informational justice can mediate the relationship between the four PIRK variables and trust in employer. These results will be discussed in detail in the Discussion and Conclusions Chapter. However, to conclude this Chapter, Table 25 presents the summary of the results for the cross-sectional structural model. Figure 9 shows the diagrammatic representation of the integrated theoretical model based on the cross-sectional results presented in Table 25.

Table 25
Summary of Results – the Cross-sectional Structural Model

	Hypothesis Statement	Results
Hypothesis 1	H1a: Power will be positively related to Employee Engagement.	Supported
	H1b: Information will be positively related to Employee Engagement.	Supported
	H1c: Rewards will be positively related to Employee Engagement.	Supported
	H1d: Knowledge will be positively related to Employee Engagement.	Supported
Hypothesis 2	H2a: Power will be positively related to Trust in employer.	Supported
	H2b: Information will be positively related to Trust in employer.	Supported
	H2c: Rewards will be positively related to Trust in employer.	Not Supported
	H2d: Knowledge will be positively related to Trust in employer.	Supported
Hypothesis 3	H3a: Power will be positively related to Distributive Justice	Supported
	H3b: Information will be positively related to Distributive Justice.	Supported
	H3c: Rewards will be positively related to Distributive Justice.	Supported
	H3d: Knowledge will be positively related to Distributive Justice.	Not Supported
Hypothesis 4	H4a: Power will be positively related to Procedural Justice.	Supported
	H4b: Information will be positively related to Procedural Justice.	Supported
	H4c: Rewards will be positively related to Procedural Justice.	Supported
	H4d: Knowledge will be positively related to Procedural Justice.	Supported
Hypothesis 5	H5a: Power will be positively related to Interpersonal Justice.	Not Supported
	H5b: Information will be positively related to Interpersonal Justice.	Not Supported
	H5c: Rewards will be positively related to Interpersonal Justice.	Supported
	H5d: Knowledge will be positively related to Interpersonal Justice.	Supported

(continued)

Table 25 (continued)
 Summary of Results – the Cross-sectional Structural Model

	Hypothesis Statement	Results
Hypothesis 6	H6a: Power will be positively related to Informational Justice.	Supported
	H6b: Information will be positively related to Informational Justice.	Supported
	H6c: Rewards will be positively related to Informational Justice.	Supported
	H6d: Knowledge will be positively related to Informational Justice.	Supported
Hypothesis 7	H7a: Power will be negatively related to Organisational Politics.	Supported
	H7b: Information will be negatively related to Organisational Politics.	Supported
	H7c: Rewards will be negatively related to Organisational Politics.	Supported
	H7d: Knowledge will be negatively related to Organisational Politics.	Supported
Hypothesis 8	H8a: Distributive Justice will be positively related to Employee Engagement.	Not Supported
	H8b: Procedural Justice will be positively related to Employee Engagement.	Supported
	H8c: Interpersonal Justice will be positively related to Employee Engagement.	Not Supported
	H8d: Informational Justice will be positively related to Employee Engagement.	Not Supported
Hypothesis 9	H9a: Distributive Justice will be positively related to Trust in employer.	Not Supported
	H9b: Procedural Justice will be positively related to Trust in employer.	Not Supported
	H9c: Interpersonal Justice will be positively related to Trust in employer.	Supported
	H9d: Informational Justice will be positively related to Trust in employer.	Supported
Hypothesis 10	H10a: Organisational Politics will be negatively related to Employee Engagement.	Supported
	H10b: Organisational Politics will be negatively related to Trust in employer.	Not Supported
Hypothesis 11	H11a: The relationship between Power and Employee Engagement will be mediated by Distributive Justice.	Not Supported
	H11b: The relationship between Information and Employee Engagement will be mediated by Distributive Justice.	Not Supported

(continued)

Table 25 (continued)
 Summary of Results – the Cross-sectional Structural Model

Hypothesis Statement	Results
H11c: The relationship between Rewards and Employee Engagement will be mediated by Distributive Justice.	Not Supported
H11d: The relationship between Knowledge and Employee Engagement will be mediated by Distributive Justice.	Not Supported
Hypothesis 12	
H12a: The relationship between Power and Employee Engagement will be mediated by Procedural Justice.	Supported
H12b: The relationship between Information and Employee Engagement will be mediated by Procedural Justice.	Supported
H12c: The relationship between Rewards and Employee Engagement will be mediated by Procedural Justice.	Supported
H12d: The relationship between Knowledge and Employee Engagement will be mediated by Procedural Justice.	Supported
Hypothesis 13	
H13a: The relationship between Power and Employee Engagement will be mediated by Interpersonal Justice.	Not Supported
H13b: The relationship between Information and Employee Engagement will be mediated by Interpersonal Justice.	Not Supported
H13c: The relationship between Rewards and Employee Engagement will be mediated by Interpersonal Justice.	Not Supported
H13d: The relationship between Knowledge and Employee Engagement will be mediated by Interpersonal Justice.	Not Supported
Hypothesis 14	
H14a: The relationship between Power and Employee Engagement will be mediated Informational Justice.	Not Supported
H14b: The relationship between Information and Employee Engagement will be mediated by Informational Justice.	Not Supported
H14c: The relationship between Rewards and Employee Engagement will be mediated by Informational Justice.	Not Supported
H14d: The relationship between Knowledge and Employee Engagement will be mediated by Informational Justice.	Not Supported
Hypothesis 15	
H15a: The relationship between Power and Emp. Engagement will be mediated by Organisational Politics.	Supported
H15b: The relationship between Information and Emp. Engagement will be mediated by Organisational Politics.	Supported
H15c: The relationship between Rewards and Emp. Engagement will be mediated by Organisational Politics.	Supported
H15d: The relationship between Knowledge and Emp. Engagement will be mediated by Organisational Politics.	Supported

(continued)

Table 25 (continued)
 Summary of Results – the Cross-sectional Structural Model

Hypothesis Statement	Results
Hypothesis 16 H16a: The relationship between Power and Trust in employer will be mediated by Distributive Justice. H16b: The relationship between Information and Trust in employer will be mediated by Distributive Justice. H16c: The relationship between Rewards and Trust in employer will be mediated by Distributive Justice. H16d: The relationship between Knowledge and Trust in employer will be mediated by Distributive Justice.	Not Supported Not Supported Not Supported Not Supported
Hypothesis 17 H17a: The relationship between Power and Trust in employer will be mediated by Procedural Justice. H17b: The relationship between Information and Trust in employer will be mediated by Procedural Justice. H17c: The relationship between Rewards and Trust in employer will be mediated by Procedural Justice. H17d: The relationship between Knowledge and Trust in employer will be mediated by Procedural Justice.	Not Supported Not Supported Not Supported Not Supported
Hypothesis 18 H18a: The relationship between Power and Trust in employer will be mediated by Interpersonal Justice. H18b: The relationship between Information and Trust in employer will be mediated by Interpersonal Justice. H18c: The relationship between Rewards and Trust in employer will be mediated by Interpersonal Justice. H18d: The relationship between Knowledge and Trust in employer will be mediated by Interpersonal Justice.	Not Supported Not Supported Supported Supported
Hypothesis 19 H19a: The relationship between Power and Trust in employer will be mediated by Informational Justice. H19b: The relationship between Information and Trust in employer will be mediated by Informational Justice. H19c: The relationship between Rewards and Trust in employer will be mediated by Informational Justice. H19d: The relationship between Knowledge and Trust in employer will be mediated by Informational Justice.	Supported Supported Supported Supported
Hypothesis 20 H20a: The relationship between Power and Trust in employer will be mediated by Organisational Politics. H20b: The relationship between Information and Trust in employer will be mediated by Organisational Politics. H20c: The relationship between Rewards and Trust in employer will be mediated by Organisational Politics. H20d: The relationship between Knowledge and Trust in employer will be mediated by Organisational Politics.	Not Supported Not Supported Not Supported Not Supported

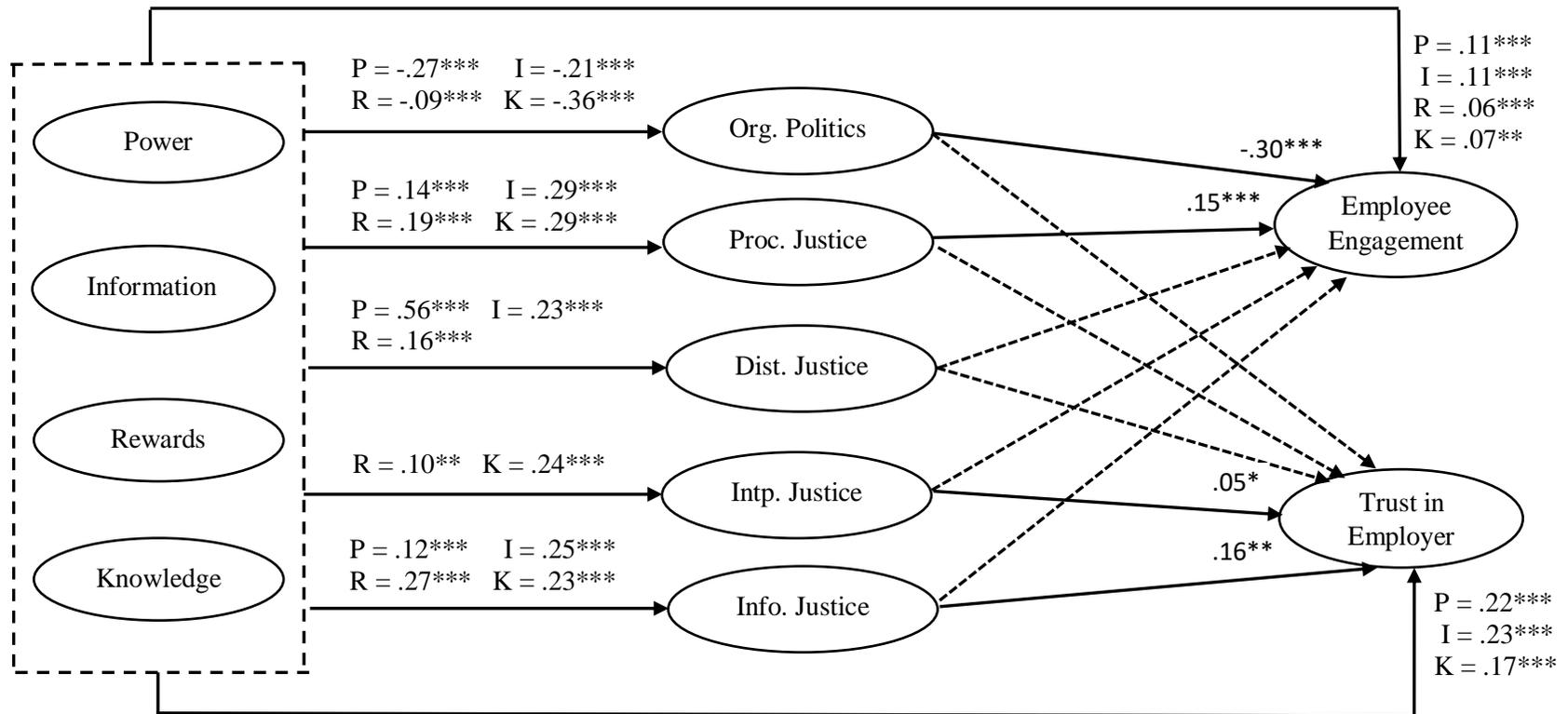


Figure 9. Integrated theoretical model based on the cross-sectional findings

Note. P = power; I = information; R = rewards; K = knowledge; only significant path coefficients are presented; broken arrow lines indicate non-significant relationships.

CHAPTER 5: LONGITUDINAL DATA ANALYSIS

5.1 Research Questions and Hypotheses

The present study used a longitudinal research design with two-time periods. Data relating to all variables of this study was gathered twice approximately six months apart. As stated in chapter 1, the purpose of collecting data twice was to test: (a) whether changes in employees experiences of HIWPs lead to changes in employee engagement and trust in employer, (b) whether changes in HIWPs lead to changes in perceptions of organisational justice and organisational politics, (c) whether changes in perceptions of organisational justice and organisational politics lead to changes in employee engagement and trust in employer, (d) whether changes in perceptions of organisational justice and organisational politics mediate the relationship between HIWPs and employee outcomes: engagement and trust. Together, these four questions resulted in a dynamic mediated model which offers the following 20 hypotheses.

Hypotheses 1: The change in HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be related to the change in Employee Engagement in the same direction.

Hypotheses 2: The change in HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be related to the change in Trust in Employer in the same direction.

Hypotheses 3: The change in HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be related to the change in Distributive Justice in the same direction.

Hypotheses 4: The change in HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be related to the change in Procedural Justice in the same direction.

Hypotheses 5: The change in HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be related to the change in Interpersonal Justice in the same direction.

Hypotheses 6: The change in HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be related to the change in Informational Justice in the same direction.

Hypotheses 7: The change in HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be related to the change in Organisational Politics in the opposite direction.

Hypotheses 8: The change in Organisational Justice dimensions [(a) Distributive, (b) Procedural, (c) Interpersonal, and (d) Informational] will be related to the change in Employee Engagement in the same direction.

Hypotheses 9: The change in Organisational Justice dimensions [(a) Distributive, (b) Procedural, (c) Interpersonal, and (d) Informational] will be related to the change in Trust in employer in the same direction.

Hypotheses 10: The change in Organisational Politics will be related to the change in [(a) Employee Engagement, and (b) Trust in Employer, in the opposite direction.

Hypotheses 11: The relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Employee Engagement will be mediated by the change in Distributive Justice.

Hypotheses 12: The relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Employee Engagement will be mediated by the change in Procedural Justice.

Hypotheses 13: The relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Employee Engagement will be mediated by the change in Interpersonal Justice.

Hypotheses 14: The relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Employee Engagement will be mediated by the change in Informational Justice.

Hypotheses 15: The relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Employee Engagement will be mediated by the change in Organisational Politics.

Hypotheses 16: The relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Trust in Employer will be mediated by the change in Distributive Justice.

Hypotheses 17: The relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Trust in Employer will be mediated by the change in Procedural Justice.

Hypotheses 18: The relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Trust in Employer will be mediated by the change in Interpersonal Justice.

Hypotheses 19: The relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Trust in Employer will be mediated by the change in Informational Justice.

Hypotheses 20: The relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Trust in Employer will be mediated by the change in Organisational Politics.

5.2 Analytic Strategy

Conventionally, at least three methods have been widely used to analyse change in two-wave longitudinal research (a) difference scores method (b) residual scores method, and (c) cross-lagged panel modelling. In addition to these methods, repeated-measures analysis of variance (ANOVA) and analysis of covariance (ANCOVA) have also been frequently used, however, Valente and MacKinnon (2017) note that the use of these designs is more apparent in typical pre-test post-test experimental studies in which the assignment variable is either categorical or discrete. Moreover, in addition to the methods mentioned above, psychometricians and others have also developed some more advanced methods to analyse change such as autoregressive modelling (Cole & Maxwell, 2003), latent growth curve modelling (Bollen & Curran, 2004, 2006) and latent change score modelling (McArdle, 2009; Ferrer & McArdle, 2003). However, as MacKinnon, Kisbu-Sakarya, and Gottschall (2013, p. 351) note, the application of these methods is more appropriate when three or more waves of data are available, and traditional methods remain popular in two-wave longitudinal studies. Given this, the purpose of this section is to review methodological literature on difference scores, residual scores, and cross-lagged design to determine which method is most appropriate in the context of present study.

Historically, the difference scores method, also known as gain scores or change scores method, has been recognised as the most intuitive and natural measure

of change (Bergh & Fairbank, 2002). However, in the early 1970s, difference scores have been criticised for their low reliability and inverse correlation with their base-line scores (Lord, 1967; Cronbach & Furby, 1970). The early reaction from scholars to this criticism was welcoming as some scholars suggested the use of residual scores as a better technique for measuring change (e.g., Linn & Slinde, 1977), however, more recently, other scholars have refuted the criticism and demonstrated that difference scores are unbiased and reliable estimates of change (Zimmerman & Zumbo, 2015; Zimmerman, 2009; Zimmerman & Williams, 1998; Willett, 1997; Williams & Zimmerman, 1996; Rogosa, 1995; Allison, 1990; Rogosa & Willett, 1983, 1985; Rogosa, Brandt, & Zimowski, 1982).

Despite a wealth of literature published in defence of the difference scores method, myths about difference scores continue to prevail. Willett (1997, p. 215) argues that the “completely unwarranted criticism” of difference scores led to the birth of alternative measurement methods including “residual difference score”. The residual difference scores are calculated by regressing time 2 scores on time 1 scores (Linn & Slinde, 1977). The resulting residual scores are then correlated or regressed on independent variable(s). Some researchers believe that the residual scores are more reliable as they have zero correlation with the initial status (base-line scores) (Linn & Slinde, 1977; Cronbach & Furby, 1970; Williams, Zimmerman, & Mazzagatti, 1987).

Nevertheless, critics have argued that residual scores are not a measure of change. For example, Smith and Beaton (2008) argue that the residual scores should not be interpreted as “corrected” change scores because the only information they provide is “which individuals have changed more, or less, than expected given the baseline scores” (p. 294). Similarly, Linn (1981, as cited in Irving & Meyer, 1999)

argues that the residual scores do not measure change at all, rather they just measure whether a person post-test score, based on pre-test scores, is more or less than the predicted score.

Furthermore, on the use of residual scores, Willett (1988) states that “there is disagreement as to what is being estimated, how well it is estimated, and how the outcome of estimation can be interpreted” (p. 380). He further argues that the methodologists should not consider residual scores as a measure of change (Willett, 1988, p. 380). Cronbach and Furby (1970), who have advocated the use of the residual scores method, also defined it as “primarily a way of signalling out individuals who changed more (or less) than expected” (p. 74). On the use of residual scores, Rogosa et al. (1982) conclude that the crucial message is that the residual scores are not a replacement or substitute for the estimation of true change (p. 740).

Finally, another popular approach to analyse longitudinal data is the cross-lagged panel modelling also known as cross-lagged path modelling or the cross-lagged regression modelling. Hamaker, Kuiper, and Grasman (2015) state that the crossed-lagged panel studies are characterised by three main objectives (a) to examine the influence of variables on each other, (b) to examine the causal direction among variables, and (c) to examine the sign of influence. More specifically, Rogosa (1980, p. 240) states that the central question in cross-lagged research is phrased as “Does X cause Y or does Y cause X”?

Given the requirements and complexities involved in establishing the causal influence of one variable on other, cross-lagged modelling approach has also been criticised. Rogosa (1980) was perhaps among the first who analysed the statistical properties of the cross-lagged correlation (CLC) method and concluded that CLC is

certainly not an adequate method to analyse longitudinal panel data and there is no justification for its use. He found that “CLC picks a wrong causal winner” and often indicates a wrong causal direction between two variables (Rogosa, 1980, p. 253).

Similarly, more recently, Hamaker et al. (2015) compared the performance of cross-lagged panel modelling with other statistical methods and demonstrated that the cross-lagged panel method (a) may indicate reciprocal relationships when these do not exist, (b) may fail to detect these relationship when they do exist, (c) may indicate the causal dominance of one variable when in fact the other variable is dominant, and (d) may indicate a negative influence of one variable on the other, whereas, the other way around is true (p. 111). Zapf, Dormann, and Frese (1996) also argue that since the cross-lagged correlations directly depend on the stability of independent and dependent variables, correlation signs opposite to the true direction may appear.

In summary, which statistical technique should be used to measure change may not be straightforward. Valente and MacKinnon (2017) note that little is known about the accuracy of methods to estimate change in mediated models. However, the methodological researchers seem to agree that the difference score method invariably measures change over time, while the residual scores is not a measure of change at all. Second, the cross-lagged design is more appropriate, if the aim of the study is to measure the causal direction between the two variables rather than the change. Therefore, since this study aims to examine change over two-time periods, the difference scores method was considered as the rational choice.

The difference scores (D) for all observed variables were calculated by subtracting Time 1 (T1) scores from Time 2 (T2) scores ($D = T2 - T1$). The measures thus reflect how much an individual has changed between T1 and T2 on a

five-point Likert scale for the variables included in the model. These change scores for each observed variable were then used to develop a structural model using IBM SPSS AMOS v.24. Using maximum likelihood method, it was then estimated whether change in the independent variables predicts change in mediating variables, and in turn, whether change in mediating variables play a mediating role in the relationships between independent and dependent variables.

5.3 Participants and Procedure

As mentioned previously, data on all variables of this study were gathered twice. The first round of the survey was conducted during the month of June and July 2016, while the second round of the survey was conducted during the month of December 2016 and January 2017.

Both at time 1 (T1) and time 2 (T2), data were collected by means of paper and pencil-based survey questionnaires, which were distributed to and collected back from the participants by the researcher and his friends. The hard copy of the survey was directly distributed to and collected back from the participants in a sealed envelope. To ensure the confidentiality of participants' responses, organisational members such as banks' branch managers and/or HR personnel were not asked to deliver or collect back survey from participants. It was assumed that, this strategy would provide confidence to participants to provide the most candid answers to survey questions.

Both at time 1 and time 2, the same survey questionnaire (see Appendix D) was used to measure constructs, however, two changes were made on the front page of the questionnaire. First, these two statements, "thank you very much for participating in the first round of the survey" and "this is the second and the final

round of the survey”, were added on the front page of time 2 survey. Secondly, the check mark statement, “I agree that the researcher may contact me for the second round of the survey”, was deleted from the front page of time 2 survey.

At time 1 survey, 2781 questionnaires were distributed. Of these, 1554 completed questionnaires were received, with a response rate of 55.87 percent. At time 2 survey, 1496 questionnaires were distributed to those employees who participated at time 1. Of these, 970 completed questionnaires were received, with a response rate of 64.83 percent. In total, 970 employees completed surveys at both time 1 and time 2, with an overall response rate of 34.87 percent to the initial sample. Of these 970 completed questionnaires received, 29 questionnaires (2.98%) had missing values. The hard copies for these cases were examined for data entry accuracy. In two cases the data had been entered incorrectly, that is, there were values for the items, however, no values were entered in the SPSS. The data were subsequently corrected for both cases.

However, to utilise all available data, Little’s (1988) MCAR test was conducted for the remaining 27 cases (2.78%). This test tests the null hypothesis that “the missing data are missing completely at random” (Little, 1998, p. 1198). This test was conducted utilising SPSS analyse menu *Missing Value Analysis*. The little’s (1988) MCAR test statistics ($\chi^2 = 1871.76$, $df = 1847$, $p < .33$) showed that the data are indeed missing at random. In the next step, utilising SPSS functionality, all missing data for 27 cases were replaced using “series mean” or “mean substitution method”, which is replacing a missing value with the overall sample mean for that particular variable (Kline, 2011, p. 58).

The mean age of the employees who completed survey at both T1 and T2 was 36.31 years ($SD = 4.88$). The minimum age of the participants was 24 years and the maximum age was 52 years. Of the participants, 730 were male employees (75.3%), whereas, 240 were female employees (24.7%). The average tenure of the participants with their current employer was 3.87 years ($SD = 2.56$). The minimum tenure of the participants with their current employer was 6 months with the maximum tenure being 18 years.

There were 526 employees who did not participate in T2 survey. The mean age of employees who did not participate at T2 was 37.11 years ($SD = 5.41$), which is not very different from those who participated at both T1 and T2 survey (36.31 years). Similarly, of these 526 employees, 425 were male (80.8%) and 101 were female (19.2%). The average tenure of these 526 employees with their current employer was 4.52 years ($SD = 3.03$), which is slightly higher than those who participated. However, the minimum tenure (6 months) and the maximum tenure (18 years) with their current employer was same as those who participated at T2.

Furthermore, there were 58 employees who left their employer during the time lag of six months between T1 and T2 survey. The mean age of these 58 employees was 35.53 years ($SD = 4.75$). Of these employees, 46 were male (79.3%) and 12 were female (20.7%). The average tenure of these 58 employees with their employer was 4.13 ($SD = 2.86$). The analysis of descriptive statistics of those who did not participate at T2 survey or left their employer during the time lag between T1 and T2 survey shows that the age, gender, and experience of these employees were similar those who participated at both T1 and T2 survey. In other words, age, gender, and tenure were unlikely to have played a role in employees' decision to participate

or not in the T2 survey, or in their decision to leave their employer. Table 26 shows the comparison of descriptive statistics of the participants of this study.

Table 26
Comparison of Descriptive Statistics of Survey Participants at T1 and T2

	T1 survey (n = 1554)	T2 survey (n = 970)	Did not Participate at T2 (n = 526)	Left their employer during the Time lag (n = 58)
Age	36.56 SD = 5.08	36.31 years SD = 4.88	37.11 years SD = 5.41	35.53 years SD = 4.75
Gender				
Male	1201 (77.3%)	730 (75.3%)	425 (80.8%)	46 (79.3%)
Female	353 (22.7%)	240 (24.7%)	101 (19.2)	12 (20.7%)
Average Tenure	4.11 years SD = 2.76	3.87 years SD = 2.56	4.52 years SD = 3.03	4.13 years SD = 2.86

5.4 The Reliability and Consistency of Measures at Time1 and Time2

The reliability or consistency of instruments used to measure the underlying constructs is a fundamental requirement for the measurement of change (Smith & Beaton, 2008). According to this point of view, the change scores are sufficiently reliable when the test scores themselves are reliable (Zimmerman & Williams, 1998). Following Smith and Beaton (2008) and Weir (2005) guidelines, Cronbach's alpha coefficient and the intraclass correlation coefficient (ICC) were used to examine the reliability of instruments used in the present study

Table 27 presents the Cronbach's alpha reliability estimates of T1 scores, T2 scores, and change scores ($\Delta = T2 - T1$), and the intraclass correlation coefficient for each latent construct's test-retest reliability. Cronbach's alphas for trust in employer ($\alpha_{T1} = .87$, $\alpha_{T2} = .82$, $\alpha_{\Delta} = .84$), employee engagement ($\alpha_{T1} = .94$, $\alpha_{T2} = .91$, $\alpha_{\Delta} = .92$),

organisational politics ($\alpha_{T1} = .93$, $\alpha_{T2} = .92$, $\alpha_{\Delta} = .93$), procedural justice ($\alpha_{T1} = .90$, $\alpha_{T2} = .89$, $\alpha_{\Delta} = .90$), distributive justice ($\alpha_{T1} = .93$, $\alpha_{T2} = .88$, $\alpha_{\Delta} = .89$), interpersonal justice ($\alpha_{T1} = .84$, $\alpha_{T2} = .84$, $\alpha_{\Delta} = .77$), informational justice ($\alpha_{T1} = .87$, $\alpha_{T2} = .87$, $\alpha_{\Delta} = .86$), power ($\alpha_{T1} = .95$, $\alpha_{T2} = .93$, $\alpha_{\Delta} = .93$), information ($\alpha_{T1} = .92$, $\alpha_{T2} = .92$, $\alpha_{\Delta} = .94$), rewards ($\alpha_{T1} = .95$, $\alpha_{T2} = .93$, $\alpha_{\Delta} = .93$), and knowledge ($\alpha_{T1} = .92$, $\alpha_{T2} = .90$, $\alpha_{\Delta} = .90$) show that the instruments used to measure latent constructs remained consistent over time.

The last three columns on the right-hand side of Table 27 show the estimated ICC coefficient for the test-retest reliability of each scale over two-time periods. The ICC coefficient for trust in employer (.60), employee engagement (.66), organisational politics (.68), procedural justice (.59), distributive justice (.53), interpersonal justice (.82), informational justice (.58), power (.62), information (.56), reward (.61), and knowledge (.64) show that the reliability of instruments is not a major concern in this study.

Table 27
Cronbach's Alpha (α) Reliability Estimates and Intraclass Correlations Coefficients of Measurement Instruments

Scale	Alpha Reliability T1	Alpha Reliability T2	Alpha Reliability Δ scores	95% confidence interval	
				ICC	LB, UP
Trust in employer	.87	.82	.84	.60	.55, .65
Employee Engagement	.94	.91	.92	.66	.62, .70
Organisational Politics	.93	.92	.93	.68	.64, .72
Procedural Justice	.90	.89	.90	.59	.54, .64
Distributive Justice	.93	.88	.89	.53	.46, .58
Interpersonal Justice	.84	.84	.77	.82	.80, .84
Informational Justice	.87	.87	.86	.58	.52, .63
Power	.95	.93	.93	.62	.57, .66
Information	.92	.92	.94	.56	.50, .61
Reward	.95	.93	.93	.61	.56, .66
Knowledge	.92	.90	.90	.64	.60, .68

Note. ICC = intraclass correlation coefficient; LB = lower bound; UB = upper bound; $n = 970$

5.5 Comparison of Descriptive Statistics and Correlations between Constructs over Time 1 and Time 2

Table 28 shows the means, standard deviations, and variances in T1, T2, and the change scores. Smith and Beaton (2008) note that when the variance increases between time 1 and time 2, the reliability of the change scores increases. They also note that the high correlation between time 1 and time 2 shows that the measure is unable to detect who has changed, thus lowering the reliability of change scores (Smith & Beaton, 2008). As shown in Table 28, there is a substantial variation in means, standard deviations, and variances between time 1 and time 2 data across all variables used in the present study. However, there is almost a negligible change in means ($M_{T1} = 3.873$, $M_{T2} = 3.871$, $M_{\Delta} = -.0021$), standard deviations ($SD_{T1} = .757$, $SD_{T2} = .755$, $SD_{\Delta} = .58$), and variances ($V_{T1} = .57$, $V_{T2} = .57$, $V_{\Delta} = .34$) between time 1 and time 2 measures of interpersonal justice.

Table 28
Comparison of Means, Standard Deviations, and Variances for Study Variables at Time 1, Time 2, and Change Scores

	<u>Time 2</u>			<u>Time 1</u>			<u>Δ Scores</u>		
	<u>M</u>	<u>SD</u>	<u>V</u>	<u>M</u>	<u>SD</u>	<u>V</u>	<u>M</u>	<u>SD</u>	<u>V</u>
Trust in Employer	3.56	.52	.28	3.50	.72	.51	.05	.67	.45
Employee Engagement	3.54	.45	.20	3.47	.55	.31	.07	.51	.26
Politics	2.50	.66	.43	2.53	.71	.50	-.03	.67	.45
Procedural Justice	3.42	.63	.40	3.36	.72	.53	.06	.73	.54
Distributive Justice	3.38	.72	.53	3.27	.85	.73	.11	.90	.81
Interpersonal Justice	3.87	.75	.57	3.87	.75	.57	-.00	.58	.34
Informational Justice	3.44	.63	.40	3.35	.74	.55	.08	.75	.57
Power	3.42	.67	.45	3.36	.76	.57	.06	.75	.57
Information	3.36	.67	.45	3.32	.73	.53	.04	.77	.60
Reward	3.36	.67	.46	3.29	.76	.58	.06	.76	.58
Knowledge	3.50	.60	.37	3.45	.69	.48	.05	.67	.45

Note. M = mean; SD = standard deviation; V = variance; mean change scores are obtained by subtracting T1 values from T2 values; delta (Δ) implies a change in variable(s)

Table 29 shows the correlations among study variables over two-time periods. The correlations between each pair of variables at T1 and T2 are shown as boldfaced/underlined. Rogosa et al. (1992) suggest that the change scores are reliable when the correlations between scores at time points are low. Similarly, Petscher and Schatchneider (2011) suggest that if the correlations between initial and final status (time points) are large, the repeated measures ANCOVA would be the more powerful test of measurement of change, whereas, if the correlations are low, difference scores method would be the more powerful test of measurement of change. As shown in Table 29, the correlations between T1 and T2 for trust in employer ($r = .45$), employee engagement ($r = .51$), organisational politics ($r = .52$), procedural justice ($r = .42$), distributive justice ($r = .36$), interpersonal justice ($r = .70$), informational justice ($r = .41$), power ($r = .45$), information ($r = .39$), reward (.44), and knowledge ($r = .47$) are not a threat to the reliability of difference scores.

Table 29
Inter-correlations among Study Variables at Time 1 and Time 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Trust T1																					
2. Trust T2	<u>.45</u>																				
3. Emp. Eng. T1	.77	.39																			
4. Emp. Eng. T2	.41	.82	<u>.51</u>																		
5. Politics T1	-.68	-.36	-.82	-.41																	
6. Politics T2	-.37	-.71	-.44	-.76	<u>.52</u>																
7. Pro. Justice T1	.69	.31	.81	.36	-.74	-.35															
8. Pro. Justice T2	.29	.67	.36	.75	-.33	-.69	<u>.42</u>														
9. Dis. Justice T1	.58	.21	.66	.26	-.64	-.29	.60	.21													
10. Dis. Justice T2	.14	.46	.19	.53	-.22	-.53	.17	.51	<u>.36</u>												
11. Intp. Justice T1	.39	.24	.41	.25	-.45	-.28	.34	.18	.28	.09											
12. Intp. Justice T2	.25	.34	.28	.35	-.29	-.43	.21	.30	.15	.20	<u>.70</u>										
13. Info. Justice T1	.65	.31	.76	.34	-.75	-.37	.76	.29	.63	.19	.34	.22									
14. Info. Justice T2	.23	.60	.30	.66	-.31	-.67	.26	.70	.21	.53	.17	.27	<u>.41</u>								
15. Power T1	.66	.26	.75	.33	-.71	-.31	.68	.26	.70	.26	.30	.15	.66	.21							
16. Power T2	.24	.58	.32	.67	-.28	-.65	.25	.61	.31	.61	.12	.26	.24	.57	<u>.45</u>						
17. Information T1	.66	.30	.76	.33	-.68	-.32	.75	.30	.61	.14	.35	.21	.68	.22	.58	.22					
18. Information T2	.28	.61	.34	.69	-.31	-.62	.31	.70	.20	.50	.18	.31	.26	.60	.23	.49	<u>.39</u>				
19. Reward T1	.63	.27	.75	.34	-.68	-.31	.74	.26	.63	.18	.34	.22	.73	.23	.71	.28	.61	.24			
20. Reward T2	.26	.56	.34	.66	-.29	-.61	.26	.68	.24	.52	.19	.30	.27	.64	.29	.65	.23	.53	<u>.44</u>		
21. Knowledge T1	.69	.30	.76	.35	-.72	-.37	.77	.32	.54	.12	.40	.26	.72	.26	.59	.20	.70	.30	.66	.28	
22. Knowledge T2	.30	.62	.36	.68	-.36	-.67	.33	.71	.18	.43	.24	.37	.30	.63	.21	.51	.31	.64	.29	.59	<u>.47</u>

Note. All correlations are significant at the $p \leq 0.01$ level (2-tailed); correlations between T1 and T2 for the same variable are underlined

5.6 The Temporal Stability of the Measurement Model

Before proceeding to the structural analysis, the temporal stability of the overall measurement model over two-time periods was examined using two standard procedures in structural equation modelling (a) goodness-of-fit statistics and (b) standardised factor loading estimates. The measurement model validated at time 1 was reproduced using time 2 data. Goodness of fit indices for the measurement model at time 1 ($\chi^2 = 5536.45$; $df = 2216$; $p = .000$; χ^2/df ratio = 2.50; SRMR = .02; IFI = .96; TLI = .96; CFI = .96; PCFI = .91; and RMSEA = .03; $n = 1554$) and for the same model with time 2 data ($\chi^2 = 4329.92$; $df = 2216$; $p = .000$; χ^2/df ratio = 1.95; SRMR = .03; IFI = .95; TLI = .94; CFI = .95; PCFI = .90; and RMSEA = .03; $n = 970$) show that the time 1 measurement model (which was used to develop the structural model at time 1) fits the time 2 data very well, confirming the temporal stability of the measures.

A close analysis of goodness-of-fit statistics shown in the paragraph above reveals a significant drop (better fit) in the chi square statistic ($\Delta \chi^2 = 1206.53$; $\Delta df = 00$) over two-time periods. This may be due to the drop in the sample size as at T1 the sample size was 1554 whereas at T2 the sample size was 970. Bentler and Bonnet (1980) and Kline (2011) state that, since χ^2 test is sensitive to sample size, the value of χ^2 may increase or decrease with an increase or decrease in sample size. To examine whether the improvement in chi square fit statistic of the same measurement model with T2 data was due to the drop in the sample size, two measurement models were compared using T1 data: (a) the measurement model with 1554 respondents, and (b) the same measurement model with *same* 970 respondents who participated at T2. The chi square difference test ($\Delta \chi^2 = 1206.53$; $\Delta df = 00$)

suggests that the drop in the chi square statistic may be attributed to the drop in the sample size supporting the general observation about the limitation of chi square test.

Figure 10 shows the measurement model which was reproduced using the T2 data. HIWPs were conceptualised as first-order four factors correlated with each other, organisational justice was conceptualised as first-order four latent factors, organisational politics was conceptualised as a second-order latent variable comprised of three first-order factors, and similarly employee engagement was also conceptualised as a second-order latent variable comprised of three first-order factors. Finally, the trust in employer was conceptualised as a first-order latent variable measured by six observed variables. As shown in Figure 10, all first-order latent factors and second-order latent factors of the higher latent variables were correlated. The factorial structure confirmed the 11 distinct latent variables at T2 as indicated by goodness-of-fit indices and chi square fit statistics mentioned above.

To continue with examining the temporal stability of the measurement model, in the next step, factor loadings at T1 and T2 were analysed. Table 29 presents the standardised factor loadings of all 89 items used to measure the latent variables comprising the measurement model of this study. Hair et al. (2016, p. 618) suggest that because unstandardised factor loadings represent covariances and thus have no upper or lower bound limit, researchers should interpret standardised factor loadings as their values are constrained between -1.0 and +1.0.

As shown in Table 30, twenty items out of eighty-nine were omitted from the analysis at both T1 and T2 due to the overlapping semantic content of these items and the associated measurement error, indicated by high modification index (MI) values. The assessment and rationale for omitting each of these twenty items and their modification index values were discussed in chapter 3. As shown in Table 30,

all items loaded well onto their respective latent variables and their factor loading estimates remained stable over time with minor increase or decrease between T1 and T2. Hair et al. (2016, p. 618) suggest that a rule of thumb is that the standardised factor loading estimates should be .5 or above, and ideally .7 or higher. As shown in Table 30, majority of items loading estimates are higher than .7, while a few items loading estimates are between .6 and .7, however, meeting the conventional criteria.

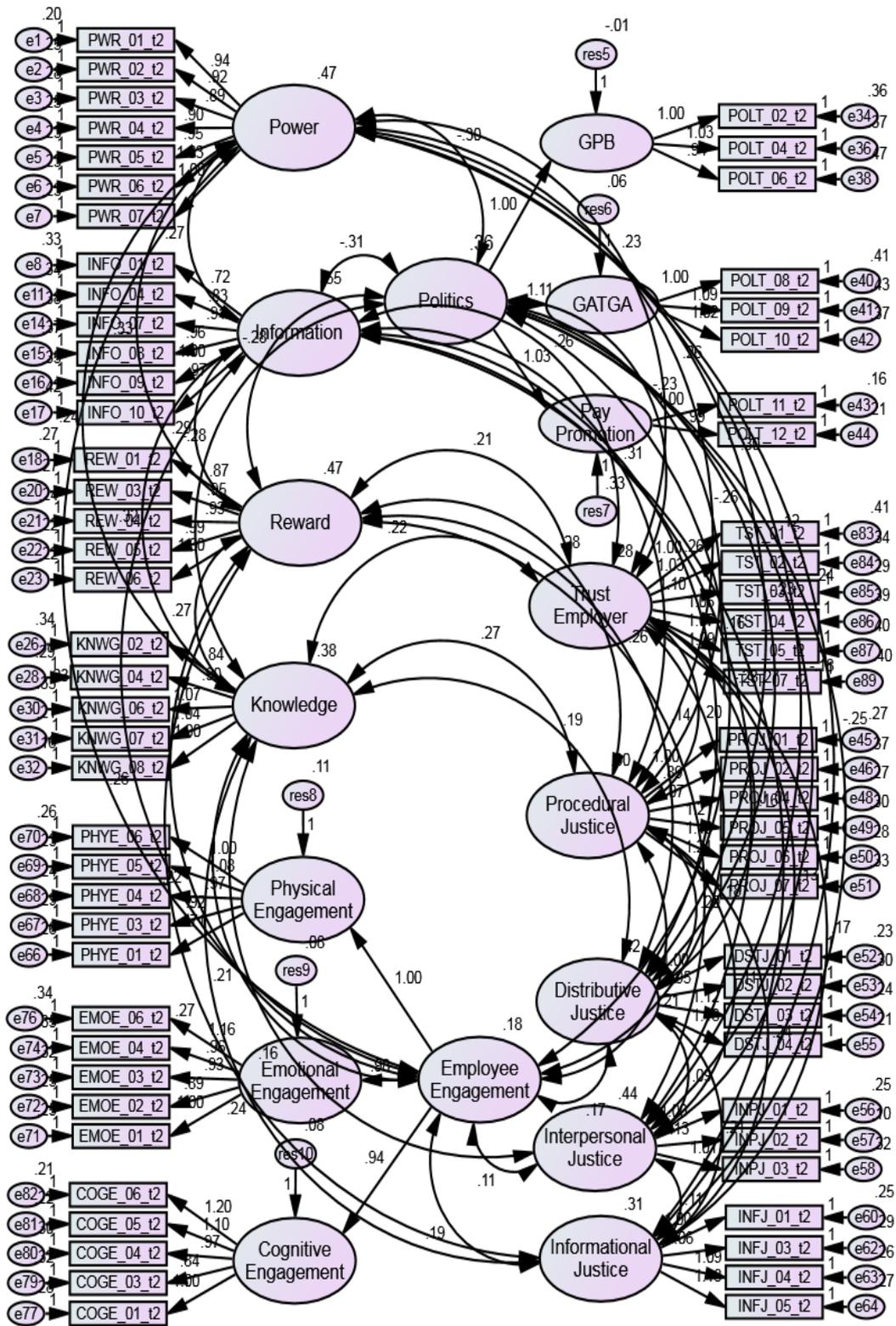


Figure 10. CFA of the measurement model with Time 2 data.

Table 30
Time 1 and Time 2 Factor Loadings of Items in the Final Measurement Model

Items	Time 1 Loading	Time 2 Loading
Power		
1. I have sufficient authority to fulfil my job responsibilities.	.85	.82
2. I have enough input in deciding how to accomplish my work.	.86	.78
3. I am encouraged to participate in decisions that affect me.	.84	.75
4. I have enough freedom over how I do my job.	.83	.77
5. I have enough authority to make decisions necessary to provide quality customer service.	.85	.80
6. For the most part, I am encouraged to participate in and make decisions that affect my day-to-day activities.	.84	.82
7. All in all, I am given enough authority to act and make decisions about my work.	.82	.82
Information		
1. Company policies and procedures are clearly communicated to employees.	.67	.68
2. Management gives sufficient notice to employees prior to making changes in policies and procedures.	Omitted from analysis	
3. Most of the Time I receive sufficient notice of changes that affect my work group.	Omitted from analysis	
4. Management takes Time to explain to employees the reasoning behind critical decisions that are made.	.71	.72
5. Management is adequately informed of the important issues in my department.	Omitted from analysis	
6. Management makes a sufficient effort to get the opinions and feelings of people who work here.	Omitted from analysis	
7. Management tends to stay informed of employee needs.	.74	.74
8. The channels of employee communication with top management are effective.	.77	.76
9. Top management communicates a clear organizational mission and how each division contributes to achieving that mission.	.77	.78
10. Employees of this company work toward common organizational goals.	.73	.74

(continued)

Table 30
Time 1 and Time 2 Factor Loadings in the Final Measurement Model (continued)

Items	Time 1 Loading	Time 2 Loading
Reward		
1. My performance evaluations within the past few years have been helpful to me in my professional development.	.73	.75
2. There is a strong link between how well I perform my job and the likelihood of my receiving recognition and praise.	Omitted from analysis	
3. There is a strong link between how well I perform my job and the likelihood of my receiving a raise in pay/salary.	.84	.78
4. There is a strong link between how well I perform my job and the likelihood of my receiving high performance appraisal ratings.	.88	.80
5. Generally, I feel this company rewards employees who make an extra effort.	.89	.82
6. I am satisfied with the amount of recognition I receive when I do a good job.	.86	.82
7. If I perform my job well, I am likely to be promoted.	Omitted from analysis	
Knowledge		
1. I am given a real opportunity to improve my skills at this company through education and training programs.	Omitted from analysis	
2. I have had sufficient job-related training.	.68	.66
3. My supervisor helped me acquire additional job-related training when I have needed it.	Omitted from analysis	
4. I receive ongoing training, which enables me to do my job better.	.70	.71
5. I am satisfied with the number of training and development programs available to me.	Omitted from analysis	
6. I am satisfied with the quality of training and development programs available to me.	.74	.75
7. The training and educational activities I have received enabled me to perform my job more effectively.	.86	.81
8. Overall, I am satisfied with my training opportunities.	.88	.84

(continued)

Table 30
Time 1 and Time 2 Factor Loadings in the Final Measurement Model (continued)

Items	Time 1 Loading	Time 2 Loading
Organisational Politics		
1. One group always get their way.	Omitted from analysis	
2. Influential group no one crosses.	.68	.70
3. Policy changes help only a few.	Omitted from analysis	
4. People build themselves up by tearing others down.	.68	.71
5. Favouritism not merit gets people ahead.	Omitted from analysis	
6. People here don't speak up for fear of retaliation.	.62	.63
7. Promotions go to top performers.	Omitted from analysis	
8. Rewards come to hard workers.	.74	.74
9. People are encouraged to speak out.	.74	.76
10. There is no place for yes men.	.75	.77
11. Pay and promotion policies are not politically applied.	.90	.90
12. Pay and promotion decisions are consistent with policies.	.86	.84
Procedural Justice		
1. Are you able to express your views and feelings during those procedures?	.75	.72
2. Can you influence the decisions arrived at by those procedures?	.65	.62
3. Are those procedures been applied consistently?	Omitted from analysis	
4. Are those procedures free of bias?	.78	.75
5. Are those procedures based on accurate information?	.79	.77
6. Are you able to appeal the decisions arrived at by those procedures?	.78	.78
7. Do those procedures uphold ethical and moral standards?	.75	.75
Distributive Justice		
1. Do those outcomes reflect the effort you have put into your work?	.88	.80

(continued)

Table 30
Time 1 and Time 2 Factor Loadings in the Final Measurement Model (continued)

Items	Time 1 Loading	Time 2 Loading
2. Are those outcomes appropriate for the work you have completed?	.90	.74
3. Do those outcomes reflect what you have contributed to your work?	.87	.82
4. Are those outcomes justified, given your performance?	.84	.85
Interpersonal Justice		
1. Does your supervisor treat you in a polite manner?	.80	.79
2. Does your supervisor treat you with dignity?	.92	.92
3. Does your supervisor treat you with respect?	.76	.76
4. Does your supervisor refrain (avoid) from improper remarks or comments?	Omitted from analysis	
Informational Justice		
1. Is your supervisor candid in communications with you?	.72	.74
2. Does your supervisor explain decision procedures thoroughly?	Omitted from analysis	
3. Are your supervisor's explanations regarding the procedures reasonable?	.74	.74
4. Does your supervisor communicate details in a Timely manner?	.81	.77
5. Does your supervisor seem to tailor communications to individuals' specific needs?	.76	.78
Employee Engagement		
1. I work with intensity on my job	.62	.60
2. I exert my full effort to my job	Omitted from analysis	
3. I devote a lot of energy to my job	.70	.67
4. I try my hardest to perform well on my job	.77	.73
5. I strive as hard as I can to complete my job	.78	.77
6. I exert a lot of energy on my job	.73	.72
7. I am enthusiastic in my job	.75	.71

(continued)

Table 30.
Time 1 and Time 2 Factor Loadings in the Final Measurement Model (continued)

Items	Time 1 Loading	Time 2 Loading
8. I feel energetic at my job	.77	.66
9. I am interested in my job	.71	.63
10. I am proud of my job	.65	.63
11. I feel positive about my job	Omitted from analysis	
12. I am excited about my job	.69	.70
13. At work, my mind is focused on my job	.67	.67
14. At work, I pay a lot of attention to my job	Omitted from analysis	
15. At work, I focus a great deal of attention on my job	.68	.58
16. At work, I am absorbed by my job	.72	.65
17. At work, I concentrate on my job	.77	.75
18. At work, I devote a lot of attention to my job	.76	.79
Trust in employer		
1. I am not sure I fully trust my employer	.64	.64
2. My employer is open and upfront with me	.71	.70
3. I believe my employer has high integrity	.76	.74
4. In general, I believe my employer's motives and intentions are good	.72	.70
5. My employer is not always honest and truthful	.68	.71
6. I don't think my employer treats me fairly	Omitted from analysis	
7. I can expect my employer to treat me in a consistent and predictable manner	.65	.72

Note. n = 970; standardised factor loadings

5.7 Longitudinal Structural Model of Panel Data

The structural model of longitudinal data examines whether (a) the change in HIWPs (power, information, rewards, and knowledge) are related to the change in trust in employer and employee engagement, (b) the change in HIWPs are related to the change in organisational politics and organisational justice dimensions (procedural, distributive, interpersonal, and informational justice), and (c) the change in organisational politics and organisational justice dimensions mediate the relationships between the change in HIWPs and the change in trust in employer and employee engagement.

To develop the structural model of change between two-times, the difference scores for all observed variables were computed by subtracting time 1 scores from time 2 scores ($\Delta = T2 - T1$) for each observed variable for each participant. These change scores were then used to develop the structural model of longitudinal data. Following Preacher and Hayes (2008) recommendation, the error terms associated with mediators were correlated with each other. Similarly, the residuals of dependent variables were also allowed to correlate with each other. Moreover, age, gender, and experience were also entered in the model as control variables, however, they were found to have no significant effect on any of the endogenous variables included in the study and, therefore, were deleted from the model.

The goodness-of-fit indices ($\chi^2 = 6223.35$; $df = 2216$; $p = .000$; χ^2/df ratio = 2.80; SRMR = .03; IFI = .91; TLI = .90; CFI = .91; PCFI = .86; and RMSEA = .04) show that the longitudinal structural model of change fits the data well.

Conventionally, a good model fit is inferred when the χ^2/df ratio is $\leq .3$, SRMR and RMSEA values are $\leq .5$, and IFI and CFI values are $\geq .90$ (Kline, 2011; Hair et al., 2016). Figure 11 shows the hypothesised structural model with change scores.

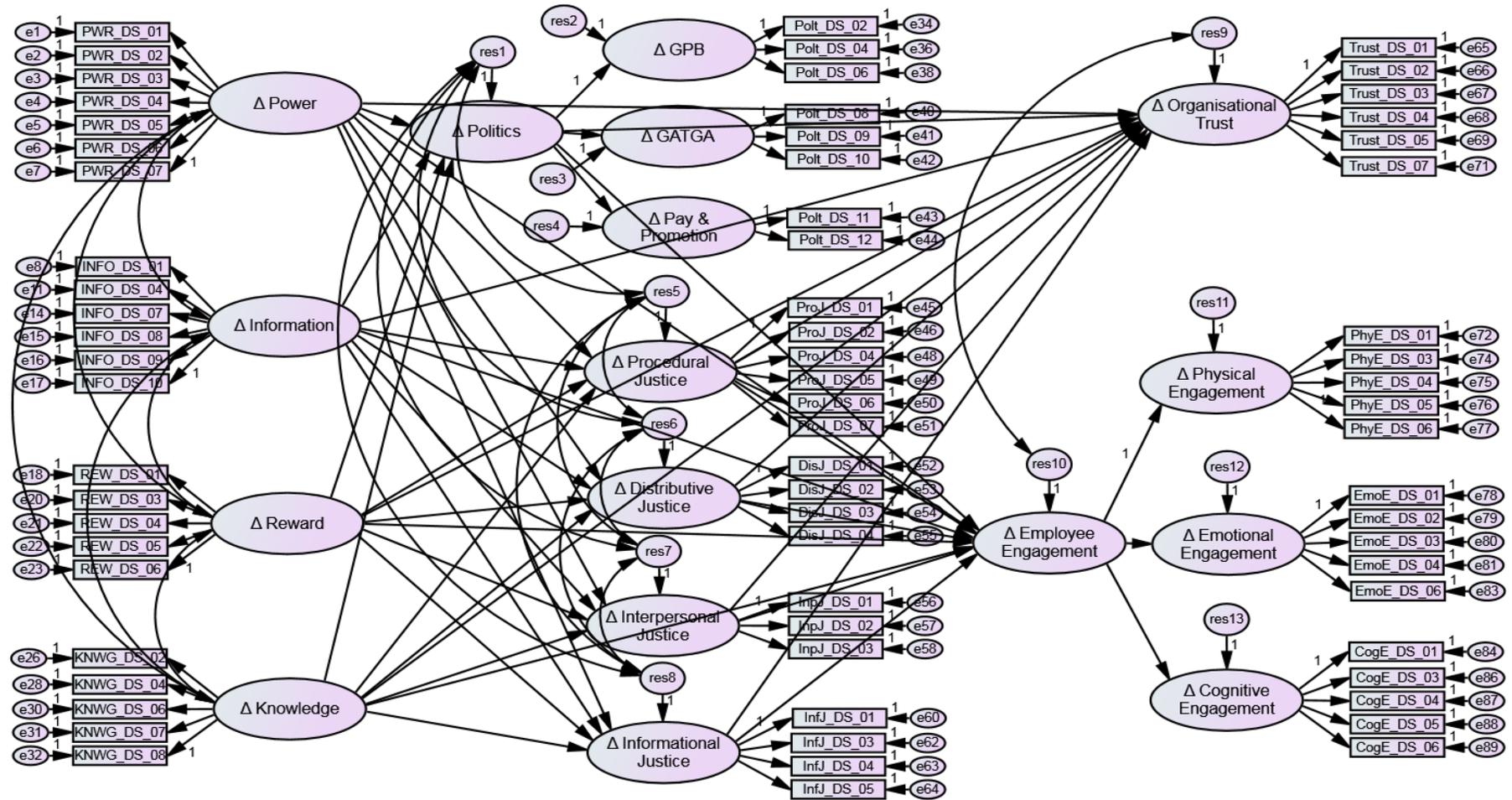


Figure 11. Longitudinal structural model of change scores.

5.8 Testing the Direct, Indirect, and Total Effects through Multiple Mediators (Hypotheses 1 to 10)

Table 31 shows the direct, indirect, and total effects of the independent variables on the mediating variables and the dependent variables, and the direct effects of the mediating variables on the dependent variables. The indirect and total effects of the independent variables on the dependent variables are through multiple mediators. For example, the indirect effect of power on employee engagement ($b = .11, p < .05$) is through all mediators included in the model. Similarly, the total effect of power on employee engagement ($b = .27, p < .001$) is the sum of the direct effect ($b = .16, p < .001$) and the indirect effect ($b = .11, p < .05$). As described in Chapter 4, to compute the significance level of indirect and total effects through multiple mediators the bootstrap method was used. The structural model shown in Figure 11 was run with 5,000 bootstrap samples.

Table 31
Direct, Indirect, and Total Effects' Unstandardised Estimates and r^2 Value

	Direct effects	Indirect effects	Total effects
Power			
Trust in Employer	.29***	.03	.32***
Employee engagement	.16***	.11*	.27***
Organisational politics	-.42***	—	—
Procedural justice	.03	—	—
Distributive justice	.33***	—	—
Interpersonal justice	.14***	—	—
Informational justice	.15***	—	—
Information			
Trust in Employer	.10**	.04	.14**
Employee engagement	.09***	.09**	.18***
Organisational politics	-.15***	—	—
Procedural justice	.15***	—	—
Distributive justice	.27***	—	—
Interpersonal justice	.05	—	—
Informational justice	.14***	—	—

(continued)

Table 31(continued)
 Direct, Indirect, and Total Effects Unstandardised Estimates and r^2 Values

	Direct effects	Indirect effects	Total effects
Reward			
Trust in Employer	-.05	.08	.03
Employee engagement	-.08	.16*	.08
Organisational politics	-.07*	—	—
Procedural justice	.40***	—	—
Distributive justice	.23***	—	—
Interpersonal justice	-.06	—	—
Informational justice	.38***	—	—
Knowledge			
Trust in Employer	.25***	.04	.29**
Employee engagement	.08*	.14*	.22***
Organisational politics	-.17***	—	—
Procedural justice	.37***	—	—
Distributive justice	.10	—	—
Interpersonal justice	.17***	—	—
Informational justice	.22***	—	—
Organisational Politics			
Trust in Employer	.02	—	—
Employee Engagement	-.21***	—	—
Procedural Justice			
Trust in Employer	.05	—	—
Employee Engagement	.29***	—	—
Distributive Justice			
Trust in Employer	.09*	—	—
Employee Engagement	.07***	—	—
Interpersonal justice			
Trust in Employer	-.06	—	—
Employee Engagement	-.10***	—	—
Informational Justice			
Trust in Employer	.11	—	—
Employee Engagement	.03	—	—
r^2 Values			
Organisational Politics			.75
Procedural Justice			.88
Distributive Justice			.60
Interpersonal Justice			.17
Informational justice			.83
Trust in Employer			.65
Employee Engaement			.92

Note. Direct, indirect, and total effects are unstandardised estimates based on 5,000 bootstrap samples; — dashes indicate data are not applicable; * $p < .05$, ** $p < .01$, *** $p < .001$.

Hypotheses 1 (1a, 1b, 1c, 1d) predicted that *the changes in HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be related to the change in Employee Engagement in the same direction*. As Table 31 shows, the changes in employees' experiences of power ($b = .16, p < .001$), information ($b = .09, p < .001$), reward ($b = -.08, p < .030$) and knowledge ($b = .08, p < .037$) were significantly related to the change in employee engagement. However, the relationship between reward and employee engagement was not in the expected direction, therefore, only hypotheses 1a, 1b, and 1d were supported.

Hypotheses 2 (2a, 2b, 2c, and 2d) predicted that *the changes in HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be related to the change in Trust in Employer in the same direction*. As Table 31 shows, the changes in employees' experiences of power ($b = .29, p < .001$), information ($b = .10, p < .008$), and knowledge ($b = .25, p < .001$) were significantly related to the change in employees' trust in their employer, therefore, hypotheses 2a, 2b, and 2d were supported. However, hypothesis 1c did not have support as the changes in employees' experiences of rewards practices ($b = -.05, p < .387$) were not significantly related to the change in employees' trust in their employer.

Hypotheses 3 (3a, 3b, 3c, and 3d) predicted that *the changes in HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be related to the change in Distributive Justice in the same direction*. As Table 31 shows, the changes in employees' experiences of power ($b = .33, p < .001$), information ($b = .27, p < .001$), and rewards ($b = .23, p < .001$) were significantly related to their perceptions of distributive justice, thus supporting hypotheses 3a, 3b, and 3c. However, results in Table 31 show no support for hypothesis 3d as the changes in employees'

experiences of knowledge ($b = .10, p < .069$) were not significantly related to their perceptions of distributive justice.

Hypotheses 4 (4a, 4b, 4c, 4d) predicted that *the changes in HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be related to the change in Procedural Justice in the same direction*. As Table 31 shows, the changes in employees' experiences of information ($b = .15, p < .001$), rewards ($b = .40, p < .001$), and knowledge ($b = .37, p < .001$) were significantly related to the change in their perceptions of procedural justice, therefore, hypotheses 4b, 4c, and 4d were supported. Hypotheses 4a predicted that the changes in employees' experiences of power practices will be related to the change in their perceptions of procedural justice, however, this hypothesis did not have support ($b = .03, p < .358$).

Hypotheses 5 (5a, 5b, 5c, and 5d) predicted that *the changes in HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be related to the change in Interpersonal Justice in the same direction*. As Table 31 shows, the changes in employees' experiences of power ($b = .14, p < .001$) and knowledge ($b = .17, p < .001$) were significantly related to their perceptions of interpersonal justice, thus hypotheses 5a and 5d were supported. However, hypotheses 5b and 5c did not have support, as the changes in employees' experiences of information practices ($b = .05, p < .118$) and reward practices ($b = -.06, p < .136$) were not significantly related to the change in their perceptions of interpersonal justice.

Hypotheses 6 (6a, 6b, 6c, and 6d) predicted that *the changes in HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be related to the change in Informational Justice in the same direction*. As Table 31 shows, the changes in employees' experiences of power ($b = .15, p < .001$), information ($b =$

.15, $p < .001$), rewards ($b = .38$, $p < .001$), and knowledge practices ($b = .22$, $p < .001$) were significantly related to their perceptions of informational justice.

Therefore, hypotheses 6 (6a, 6b, 6c, and 6d) were supported as the changes in all four PIRK variables predicted changes in perceptions of informational justice.

Hypotheses 7 (7a, 7b, 7c, and 7d) predicted that *the changes in HIWPs [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] will be related to the change in Organisational Politics in the opposite direction*. As Table 31 shows, the changes in employees' experiences of power ($b = -.42$, $p < .001$), information ($b = -.15$, $p < .001$), rewards ($b = -.07$, $p < .049$) and knowledge practices ($b = -.17$, $p < .001$) were significantly related to their perceptions of organisational politics. Therefore, hypotheses 7 (7a, 7b, 7c, and 7d) were supported as the changes in employees' experiences of all four PIRK variables predicted the changes in perceptions of organisational politics in the expected direction.

Hypotheses 8 (8a, 8b, 8c, and 8d) predicted that *the changes in Organisational Justice [(a) Distributive, (b) Procedural, (c) Interpersonal, and (d) Informational] will be related to the change in Employee Engagement in the same direction*. As Table 31 shows, the changes in employees' perceptions of distributive justice ($b = .07$, $p < .001$), procedural justice ($b = .29$, $p < .001$), and interpersonal justice ($b = -.10$, $p < .001$) were significantly related to the change in employee engagement, however, the relationship between interpersonal justice and employee engagement is in the opposite direction than proposed. Moreover, the changes in employees' perceptions of informational justice ($b = .04$, $p < .606$) were not significantly related to the change in employee engagement.

Hypotheses 9 (9a, 9b, 9c, and 9d) predicted that *the changes in Organisational Justice [(a) Distributive, (b) Procedural, (c) Interpersonal, and (d) Informational] will be related to the change in Trust in Employer in the same direction*. As shown in Table 31, the changes in employees' perceptions of distributive justice ($b = .09, p < .015$) were significantly related to the change in employees' trust in their employer. However, the changes in employees' experiences of procedural justice ($b = .053, p < .673$), interpersonal justice ($b = -.060, p < .122$), and informational justice ($b = .112, p < .262$) were not significantly related to employees' trust in their employer. In summary, distributive justice was the only dimension that has a significant relationship with the change in employees' trust in their employer.

Hypotheses 10 (10a and 10b) predicted that *the changes in employees' perceptions of Organisational Politics will be related to the change in Employee Engagement and Trust in Employer in the opposite direction* such that an increase in organisational politics perceptions will decrease employee engagement and trust in employer and a decrease in organisational politics perceptions will increase employee engagement. As Table 31 shows, the changes in employees' perceptions of organisational politics ($b = -.21, p < .001$) were significantly related to the change in employee engagement in the proposed direction, thus supporting hypothesis 10a. However, as shown in Table 31, the changes in employees' perceptions of organisational politics ($b = .018, p < .775$) were not significantly related to the change in employees' trust in their employer, thus hypothesis 10b did not have support in the data.

Table 32
Direct, Indirect, and Total effects of Independent Variables on Dependent Variables through each Mediating Variable

Independent variable	Path a →	Mediating variable	Path b →	Dependent variable	Indirect effect a × b	Direct effect c'	Total effect c = c' + ab
Power	-.42***	Org. Politics	.02	Trust in employer	-.00	.29***	.29
Power	.03	Pro. Justice	.05	Trust in employer	.00	.29***	.29
Power	.33***	Dist. Justice	.09*	Trust in employer	.03**	.29***	.32
Power	.14***	Intp. Justice	-.06	Trust in employer	-.00	.29***	.29
Power	.15***	Info. Justice	.11	Trust in employer	.02	.29***	.31
Information	-.15***	Org. Politics	.02	Trust in employer	-.00	.10**	.10
Information	.15***	Pro. Justice	.05	Trust in employer	.00	.10**	.10
Information	.27***	Dist. Justice	.09*	Trust in employer	.02**	.10**	.12
Information	.05	Intp. Justice	-.06	Trust in employer	-.00	.10**	.10
Information	.14***	Info. Justice	.11	Trust in employer	.02	.10**	.12
Reward	-.07*	Org. Politics	.02	Trust in employer	-.00	-.05	-.05
Reward	.40***	Pro. Justice	.05	Trust in employer	.02	-.05	-.03
Reward	.23***	Dist. Justice	.09*	Trust in employer	.02*	-.05	-.03
Reward	-.06	Intp. Justice	-.06	Trust in employer	.00	-.05	-.05
Reward	.38***	Info. Justice	.11	Trust in employer	.04	-.05	.01
Knowledge	-.17***	Org. Politics	.02	Trust in employer	-.00	.25***	.25
Knowledge	.37***	Pro. Justice	.05	Trust in employer	.02	.25***	.27
Knowledge	.10	Dist. Justice	.09*	Trust in employer	.00	.25***	.25
Knowledge	.17***	Intp. Justice	-.06	Trust in employer	-.01	.25***	.24
Knowledge	.22***	Info. Justice	.11	Trust in employer	.02	.25***	.27

(continued)

Table 32 (continued)

Independent variable	Path a →	Mediating variable	Path b →	Dependent variable	Indirect effect (a × b)	Direct effect IV to DV (c')	Total effect c = c' + ab
Power	-.42***	Org. Politics	-.21***	Emp. Engagement	.08***	.16***	.24
Power	.03	Pro. Justice	.29***	Emp. Engagement	.00	.16***	.16
Power	.33***	Dist. Justice	.07***	Emp. Engagement	.02***	.16***	.18
Power	.14***	Intp. Justice	-.10***	Emp. Engagement	-.01**	.16***	.15
Power	.15***	Info. Justice	.03	Emp. Engagement	.00	.16***	.16
Information	-.15***	Org. Politics	-.21***	Emp. Engagement	.03***	.09***	.12
Information	.15***	Pro. Justice	.29***	Emp. Engagement	.04***	.09***	.13
Information	.27***	Dist. Justice	.07***	Emp. Engagement	.02***	.09***	.11
Information	.05	Intp. Justice	-.10***	Emp. Engagement	-.00	.09***	.09
Information	.14***	Info. Justice	.03	Emp. Engagement	.00	.09***	.09
Reward	-.07*	Org. Politics	-.21***	Emp. Engagement	.01*	-.08*	-.07
Reward	.40***	Pro. Justice	.29***	Emp. Engagement	.12***	-.08*	.04
Reward	.23***	Dist. Justice	.07***	Emp. Engagement	.02**	-.08*	-.06
Reward	-.06	Intp. Justice	-.10***	Emp. Engagement	.00	-.08*	-.08
Reward	.38***	Info. Justice	.03	Emp. Engagement	.01	-.08*	-.07
Knowledge	-.17***	Org. Politics	-.21***	Emp. Engagement	.04***	.08*	.12
Knowledge	.37***	Pro. Justice	.29***	Emp. Engagement	.11***	.08*	.19
Knowledge	.10	Dist. Justice	.07***	Emp. Engagement	.00	.08*	.08
Knowledge	.17***	Intp. Justice	-.10***	Emp. Engagement	-.01***	.08*	.07
Knowledge	.22***	Info. Justice	.03	Emp. Engagement	.00	.08*	.08

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

5.9 Testing the Indirect Effects through Individual Mediator (Hypotheses 11 to 20)

Table 32 shows the direct, indirect, and total effects of HIWPs on employee engagement and trust in employer through each mediator, however, the indirect effect through a specific mediator is in the presence of multiple mediators. Following the hypotheses testing strategy described in Chapter 4, the indirect and total effects through each mediator were computed using the product of coefficient approach described by MacKinnon et al. (2002). Following this approach, the coefficient of path a (independent to mediating variable) was multiplied with path b (mediating variable to dependent variable). Unstandardised estimates and corresponding standard errors for path ‘a’ and path ‘b’ were used to calculate the statistical significance for each indirect effect using the online Sobel test calculator.

Hypotheses 11 (11a, 11b, 11c, and 11d) predicted that *the relationships between the changes in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Employee Engagement will be mediated by the change in Distributive Justice*. As Table 32 shows, the indirect mediated effects of the changes in employees’ experiences of power ($b = .02, p < .001$), reward ($b = .02, p < .001$), and information ($b = .02, p < .005$) were significantly related the change in employee engagement though perceptions of distributive justice, hypotheses 11a, 11b, and 11c were supported. However, the indirect mediated effect of the changes in employees’ experiences of knowledge ($b = .00, p < .085$) on employee engagement through perceptions of distributive justice is not statistically significant, thus hypothesis 11d did not have support.

Hypotheses 12 (12a, 12b, 12c, and 12d) predicted that *the relationships between the changes in [(a) Power, (b) Information, (c) Rewards, and (d)*

Knowledge] and Employee Engagement will be mediated by the change in Procedural Justice. As Table 32 shows, the indirect mediated effects of the changes in employees' experiences of information ($b = .04, p < .001$), reward ($b = .12, p < .001$), and knowledge ($b = .11, p < .001$) were significantly related to the change in employee engagement through perceptions of procedural justice, thus hypotheses 12b, 12c, and 12d were supported. However, the indirect mediated effect of the changes in employees' experiences of power ($b = .00, p < .158$) on employee engagement through perceptions of procedural justice is not statistically significant, thus hypothesis 12a did not have support.

Hypotheses 13 (13a, 13b, 13c, and 13d) predicted that *the relationships between the changes in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Employee Engagement will be mediated by the change in Interpersonal Justice.* As Table 32 shows, the indirect mediated effects of the changes in employees' experiences of power ($b = -.01, p < .004$), and knowledge practices ($b = -.01, p < .001$) were significantly related to employee engagement through perceptions of interpersonal justice, however, the direction of these relationships are not in the proposed direction, thus no support was found for hypotheses 13a and 13d. Similarly, the indirect mediated effects of the changes in employees' experiences of rewards ($b = -.00, p < .113$), and information practices ($b = .00, p < .150$) were not significantly related to employee engagement through perceptions of interpersonal justice, thus no support was found for hypotheses 13b and 13c. In summary, the results do not support hypotheses 13a, 13b, 13c, and 13d, however, indicate that the changes in employees' perceptions of power ($b = .16, p < .001$), information ($b = .09, p < .001$), and knowledge ($b = .08, p < .05$) have significant direct relationships with the change in employee engagement.

Hypotheses 14 (14a, 14b, 14c, and 14d) predicted that *the relationships between the changes in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Employee Engagement will be mediated by the change in Informational Justice*. As Table 32 shows, the indirect mediated effects of the changes in employees' experiences of power ($b = .00, p < .551$), reward ($b = .00, p < .549$), information ($b = .01, p < .548$), and knowledge ($b = .00, p < .550$) practices were not significantly related to employee engagement through perceptions of informational justice, thus hypotheses 14a, 14b, 14c, and 14d were not supported. As shown in Table 32, the direct effects of the changes in power ($b = .15, p < .001$), information ($b = .14, p < .001$), rewards ($b = .38, p < .001$), and knowledge ($b = .22, p < .001$) practices were significantly related to employees' perceptions of informational justice. However, since the changes in perceptions of informational justice were not significantly related to employee engagement, the mediated indirect effects of PIRK variables on employee engagement through informational justice were non-significant.

Hypotheses 15 (15a, 15b, 15c, and 15d) predicted that *the relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Employee Engagement will be mediated by the change in Organisational Politics*. As Table 32 shows, the mediated effects of the changes in employees' experiences of power ($b = .08, p < .001$), information ($b = .01, p < .026$), rewards ($b = .03, p < .001$), and knowledge ($b = .04, p < .001$) were significantly related to employee engagement through perceptions of organisational politics, thus hypotheses 15a, 15b, 15c, and 15d were supported. In summary, results indicate that the changes in employees' perceptions of organisational politics play a mediating

role in the relationships between employees' experiences of PIRK variables and employee engagement.

Hypotheses 16 (16a, 16b, 16c, and 16d) predicted that *the relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Trust in Employer will be mediated by the change in Distributive Justice*. As Table 32 shows, the indirect mediated effects of the changes in employees' experiences of power ($b = .03, p < .006$) information ($b = .02, p < .004$), and rewards ($b = .02, p < .011$) were significantly related to the change in employees' trust in their employer through perceptions of distributive justice, thus hypotheses 16a, 16b, and 16c were supported. However, as shown in Table 32, the indirect mediated effect of the changes in employees' experiences of knowledge ($b = .00, p < .096$) is not significantly related to the change in employees' trust in their employer through perceptions of distributive justice, hypothesis 16d has no support. Although the changes in perceptions of distributive justice are significantly related to the change in employees' trust in their employer ($b = .09, p < .05$), however, because the changes in employees' experiences of knowledge are not significantly related to the changes in their perceptions of distributive justice, this mediation hypothesis has no support.

Hypotheses 17 (17a, 17b, 17c, and 17d) predicted that *the relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Trust in Employer will be mediated by the change in Procedural Justice*. As Table 32 shows, the indirect mediated effects of the changes in employees' experiences of power ($b = .00, p < .668$), rewards ($b = .00, p < .674$), information ($b = .02, p < .677$), and knowledge ($b = .02, p < .678$) were not significantly related to the changes in employees' trust in their employer through

perceptions of procedural justice, thus hypotheses 17a, 17b, 17c, and 17d have no support. Results show that the changes in employees' experiences of information ($b = .15, p < .001$), rewards ($b = .40, p < .001$), and knowledge ($b = .37, p < .001$) are significantly related to the changes in employees' perceptions of procedural justice, however, because the changes in perceptions of procedural justice were not significantly related to the trust in employer, the indirect effects of PIRK variables on trust in employer through procedural justice were non-significant.

Hypotheses 18 (18a, 18b, 18c, and 18d) predicted that *the relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Trust in Employer will be mediated by the change in Interpersonal Justice*. As Table 32 shows, the indirect mediated effects of the changes in employees' experiences of power ($b = -.00, p < .167$), rewards ($b = -.00, p < .200$), information ($b = .00, p < .423$), and knowledge ($b = -.02, p < .070$) were not significantly related to the change in employees' trust in their employer through perceptions of interpersonal justice, thus hypotheses 18a, 18b, 18c, and 18d have no support.

Hypotheses 19 (19a, 19b, 19c, and 19d) predicted that *the relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Trust in Employer will be mediated by the changes in Informational Justice*. As Table 32 shows, the indirect mediated effects of the changes in employees' experiences of power ($b = .02, p < .282$), reward ($b = .02, p < .277$), information ($b = .04, p < .765$), and knowledge ($b = .02, p < .622$) were not significantly related to the change in employees' trust in their employer through perceptions of informational justice, thus hypotheses 19a, 19b, 19c, and 19d have no support.

Hypotheses 20 (20a, 20b, 20c, and 20d) predicted that *the relationships between the change in [(a) Power, (b) Information, (c) Rewards, and (d) Knowledge] and Trust in Employer will be mediated by the change in Organisational Politics*. As Table 32 shows, the indirect mediated effects of the changes in employees' experiences of power ($b = -.00, p < .738$), rewards ($b = -.00, p < .073$), information ($b = .00, p < .620$), and knowledge ($b = -.00, p < .739$) practices were not significantly related to the change in employees' trust in their employer through perceptions of informational justice, thus hypotheses 20a, 20b, 20c, and 20d have no support.

In summary, as organisational processes are dynamic in nature, it was originally conceived that the change ($\Delta = T2 - T1$) in employees experiences of the four PIRK variables would be associated with the change in perceptions of organisational politics and the four justice dimensions, and in turn, the change in employees perceptions of organisational politics and the four justice dimensions would mediate the relationships between the change in the four PIRK variables and employee outcomes measured as employee engagement and trust in employer.

The results of the longitudinal structural model partially supported the dynamic mediation hypotheses. The results indicate that the change in four PIRK variables is associated with the change in employees' perceptions of organisational politics and organisational justice. The results also indicate that the change in four PIRK variables is also associated with the change in employee engagement and trust in employer. Regarding the dynamic mediation hypotheses, the results indicate that perceptions of organisational politics, procedural justice, and distributive justice can be potential mediators in the relationship between the four PIRK variables and employee engagement, whereas, the distributive justice can be a potential mediator

in the relationship between the four PIRK variables and trust in employer. These results are discussed in detail in the Discussion and Conclusion chapter. However, to conclude this Chapter, Table 33 presents the summary of the results of the longitudinal structural model. Figure 12 shows the diagrammatic representation of the integrated model based on the results of the longitudinal structural model.

Table 33.
Summary of the Results – the Longitudinal Structural Model

Hypothesis Statement		Results
Hypothesis 1	H1a: The change in Power will be related to the change in Employee Engagement in the same direction.	Supported
	H1b: The change in Information will be related to the change in Employee Engagement in the same direction.	Supported
	H1c: The change in Rewards will be related to the change in Employee Engagement in the same direction.	Not Supported
	H1d: The change in Knowledge will be related to the change in Employee Engagement in the same direction.	Supported
Hypothesis 2	H2a: The change in Power will be related to the change in Trust in employer in the same direction.	Supported
	H2b: The change in Information will be related to the change in Trust in employer in the same direction.	Supported
	H2c: The change in Rewards will be related to the change in Trust in employer in the same direction.	Not Supported
	H2d: The change in Knowledge will be related to the change in Trust in employer in the same direction.	Supported
Hypothesis 3	H3a: The change in Power will be related to the change in Distributive Justice in the same direction.	Supported
	H3b: The change in Information will be related to the change in Distributive Justice in the same direction.	Supported
	H3c: The change in Rewards will be related to the change in Distributive Justice in the same direction.	Supported
	H3d: The change in Knowledge will be related to the change in Distributive Justice in the same direction.	Not Supported
Hypothesis 4	H4a: The change in Power will be related to the change in Procedural Justice in the same direction.	Not Supported
	H4b: The change in Information will be related to the change in Procedural Justice in the same direction.	Supported

(continued)

Table 33 (continued)

Hypothesis Statement	Results
H4c: The change in Rewards will be related to the change in Procedural Justice in the same direction.	Supported
H4d: The change in Knowledge will be related to the change in Procedural Justice in the same direction.	Supported
Hypothesis 5	
H5a: The change in Power will be related to the change in Interpersonal Justice in the same direction.	Supported
H5b: The change in Information will be related to the change in Interpersonal Justice in the same direction.	Not Supported
H5c: The change in Rewards will be related to the change in Interpersonal Justice in the same direction.	Not Supported
H5d: The change in Knowledge will be related to the change in Interpersonal Justice in the same direction.	Supported
Hypothesis 6	
H6a: The change in Power will be related to the change in Informational Justice in the same direction.	Supported
H6b: The change in Information will be related to the change in Informational Justice in the same direction.	Supported
H6c: The change in Rewards will be related to the change in Informational Justice in the same direction.	Supported
H6d: The change in Knowledge will be related to the change in Informational Justice in the same direction.	Supported
Hypothesis 7	
H7a: The change in Power will be related to the change in Organisational Politics in the opposite direction.	Supported
H7b: The change in Information will be related to the change in Organisational Politics in the opposite direction.	Supported
H7c: The change in Rewards will be related to the change in Organisational Politics in the opposite direction.	Supported

(continued)

Table 33 (continued)

	Hypothesis Statement	Results
	H7d: The change in Knowledge will be related to the change in Organisational Politics in the opposite direction.	Supported
Hypothesis 8	H8a: The change in Distributive Justice will be related to the change in Employee Engagement in the same direction.	Supported
	H8b: The change in Procedural Justice will be related to the change in Employee Engagement in the same direction.	Supported
	H8c: The change in Interpersonal Justice will be related to the change in Employee Engagement in the same direction.	Not Supported
	H8d: The change in Informational Justice will be related to the change in Employee Engagement in the same direction.	Not Supported
Hypothesis 9	H9a: The change in Distributive Justice will be related to the change in Trust in employer in the same direction.	Supported
	H9b: The change in Procedural Justice will be related to the change in Trust in employer in the same direction.	Not Supported
	H9c: The change in Interpersonal Justice will be related to the change in Trust in employer in the same direction.	Not Supported
	H9d: The change in Informational Justice will be related to the change in Trust in employer in the same direction.	Not Supported
Hypothesis 10	H10a: The change in Organisational Politics will be related to the change in Employee Engagement in the opposite direction.	Supported
	H10b: The change in Organisational Politics will be related to the change in Trust in employer in the opposite direction.	Not Supported

(continued)

Table 33 (continued)

Hypothesis Statement	Results
Hypothesis 11 H11a: The relationship between the changes in Power and Employee Engagement will be mediated by the changes in Distributive Justice.	Supported
H11b: The relationship between the changes in Information and Employee Engagement will be mediated by the changes in Distributive Justice.	Supported
H11c: The relationship between the changes in Rewards and Employee Engagement will be mediated by the changes in Distributive Justice.	Supported
H11d: The relationship between the changes in Knowledge and Employee Engagement will be mediated by the changes in Distributive Justice.	Not Supported
Hypothesis 12 H12a: The relationship between the changes in Power and Employee Engagement will be mediated by the changes in Procedural Justice.	Not Supported
H12b: The relationship between the changes in Information and Employee Engagement will be mediated by the changes in Procedural Justice.	Supported
H12c: The relationship between the changes in Rewards and Employee Engagement will be mediated by the changes in Procedural Justice.	Supported
H12d: The relationship between the changes in Knowledge and Employee Engagement will be mediated by the changes in Procedural Justice.	Supported
Hypothesis 13 H13a: The relationship between the changes in Power and Employee Engagement will be mediated by the changes in Interpersonal Justice.	Not Supported
H13b: The relationship between the changes in Information and Employee Engagement will be mediated by the changes in Interpersonal Justice.	Not Supported
H13c: The relationship between the changes in Rewards and Employee Engagement will be mediated by the changes in Interpersonal Justice.	Not Supported

(continued)

Table 33 (continued)

	Hypothesis Statement	Results
	H13d: The relationship between the changes in Knowledge and Employee Engagement will be mediated by the changes in Interpersonal Justice.	Not Supported
Hypothesis 14	H14a: The relationship between the changes in Power and Employee Engagement will be mediated by the changes in Informational Justice.	Not Supported
	H14b: The relationship between the changes in Information and Employee Engagement will be mediated by the changes in Informational Justice.	Not Supported
	H14c: The relationship between the changes in Rewards and Employee Engagement will be mediated by the changes in Informational Justice.	Not Supported
	H14d: The relationship between the changes in Knowledge and Employee Engagement will be mediated by the changes in Informational Justice.	Not Supported
Hypothesis 15	H15a: The relationship between the changes in Power and Employee Engagement will be mediated by the changes in Organisational Politics.	Supported
	H15b: The relationship between the changes in Information and Employee Engagement will be mediated by the changes in Organisational Politics.	Supported
	H15c: The relationship between the changes in Rewards and Employee Engagement will be mediated by the changes in Organisational Politics.	Supported
	H15d: The relationship between the changes in Knowledge and Employee Engagement will be mediated by the changes in Organisational Politics.	Supported
Hypothesis 16	H16a: The relationship between the changes in Power and Trust in employer will be mediated by the changes in Distributive Justice.	Supported
	H16b: The relationship between the changes in Information and Trust in employer will be mediated by the changes in Distributive Justice.	Supported

(continued)

Table 33 (continued)

Hypothesis Statement	Results
H16c: The relationship between the changes in Rewards and Trust in employer will be mediated by the changes in Distributive Justice.	Supported
H16d: The relationship between the changes in Knowledge and Trust in employer will be mediated by the changes in Distributive Justice.	Not Supported
Hypothesis 17	
H17a: The relationship between the changes in Power and Trust in employer will be mediated by the changes in Procedural Justice.	Not Supported
H17b: The relationship between the changes in Information and Trust in employer will be mediated by the changes in Procedural Justice.	Not Supported
H17c: The relationship between the changes in Rewards and Trust in employer will be mediated by the changes in Procedural Justice.	Not Supported
H17d: The relationship between the changes in Knowledge and Trust in employer will be mediated by the changes in Procedural Justice.	Not Supported
Hypothesis 18	
H18a: The relationship between the changes in Power and Trust in employer will be mediated by the changes in Interpersonal Justice.	Not Supported
H18b: The relationship between the changes in Information and Trust in employer will be mediated by the changes in Interpersonal Justice.	Not Supported
H18c: The relationship between the changes in Rewards and Trust in employer will be mediated by the changes in Interpersonal Justice.	Not Supported
H18d: The relationship between the changes in Knowledge and Trust in employer will be mediated by the changes in Interpersonal Justice.	Not Supported

(continued)

Table 33 (continued)

Hypothesis Statement	Results
Hypothesis 19 H19a: The relationship between the changes in Power and Trust in employer will be mediated by the changes in Informational Justice.	Not Supported
H19b: The relationship between the changes in Information and Trust in employer will be mediated by the changes in Informational Justice.	Not Supported
H19c: The relationship between the changes in Rewards and Trust in employer will be mediated by the changes in Informational Justice.	Not Supported
H19d: The relationship between the changes in Knowledge and Trust in employer will be mediated by the changes in Informational Justice.	Not Supported
Hypothesis 20 H19a: The relationship between the changes in Power and Trust in employer will be mediated by the changes in Organisational Politics.	Not Supported
H19b: The relationship between the changes in Information and Trust in employer will be mediated by the changes in Organisational Politics.	Not Supported
H19c: The relationship between the changes in Rewards and Trust in employer will be mediated by the changes in Organisational Politics.	Not Supported
H19d: The relationship between the changes in Knowledge and Trust in employer will be mediated by the changes in Organisational Politics.	Not Supported

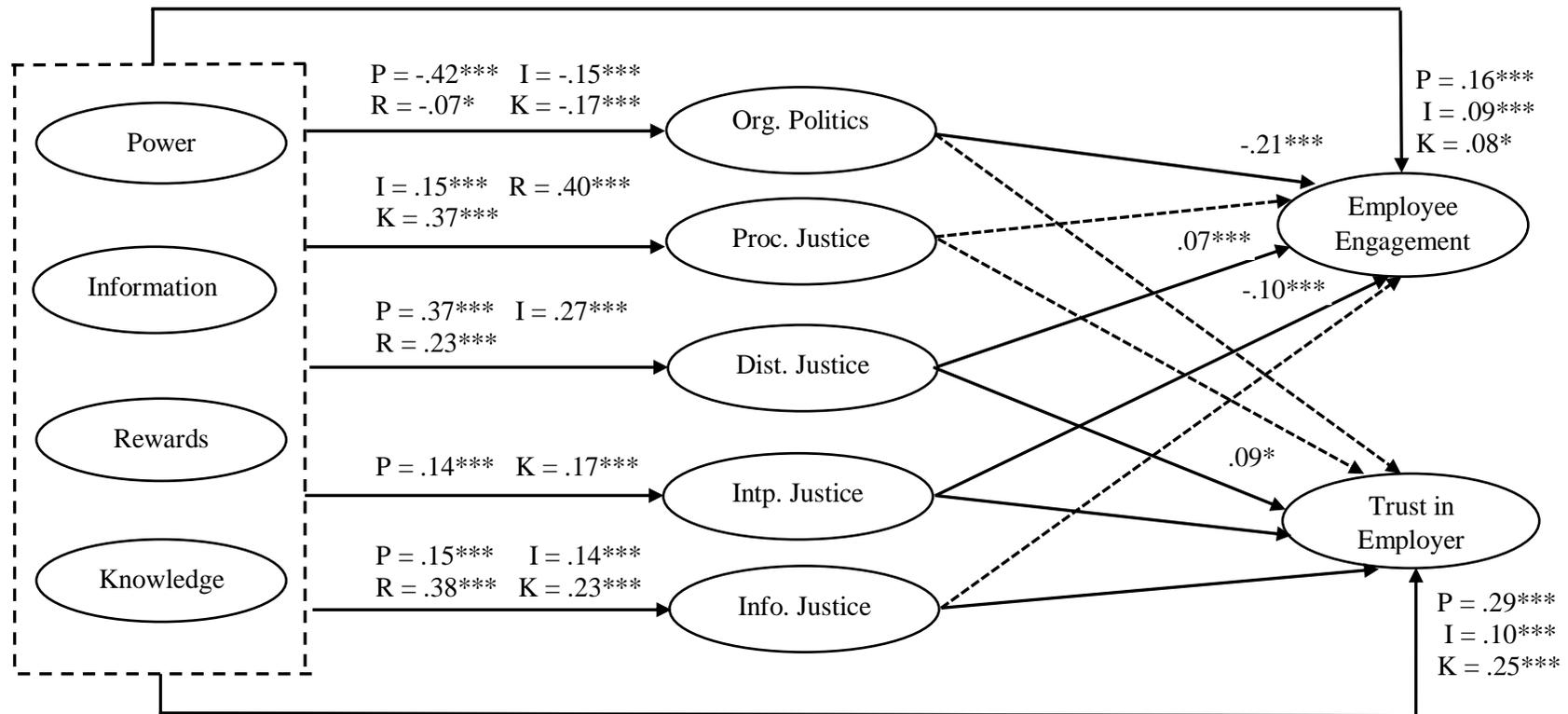


Figure 12. Integrated theoretical model based on the longitudinal findings

Note. P = power; I = information; R = rewards; K = knowledge; only the significant path coefficients are presented; broken arrow lines indicate non-significant relationships.

CHAPTER 6: DISCUSSION AND CONCLUSIONS

As stated in Chapter One, this study attempted to answer three research questions. First, how do HIWPs influence employee and employer outcomes? Second, do HIWPs live up to the mutual gains perspective of HRM? Third, do changes in employees' experiences of HIWPs lead to changes in their work attitudes and behaviours? To address these research questions, data relating measures of all the variables included in this study were gathered twice, and the hypothesised relationships among constructs were examined both cross-sectionally and longitudinally through structural equation modelling.

The aims of testing the cross-sectional model were to explore (a) the direct relationships between HIWPs and the dependent variables: employee engagement and trust in employer, (b) the direct relationships between HIWPs and the mediating variables: organisational politics and organisational justice, and (c) the mediating role of employees' perceptions of organisational politics and organisational justice in the relationships between HIWPs and employee engagement and trust in employer. Accordingly, twenty hypotheses were formed and tested using the cross-sectional structural model.

In contrast, the aims of testing the longitudinal model were to assess the extent to which (a) the changes in employees' experiences of HIWPs are related to the changes in trust in employer and engagement, (b) the changes in HIWPs are related to the changes in organisational politics and organisational justice, and (c) whether the changes in perceptions of organisational politics and organisational justice mediate the relationships between the changes in HIWPs and the changes in trust in employer and employee engagement. Accordingly, twenty hypotheses were formed and tested using the longitudinal structural model.

6.1 Summary of the Main Findings from the Cross-sectional Structural Model

Out of 20 hypotheses tested using the cross-sectional structural model, 7 were fully supported (H1, H3, H6, H7, H11, H15, H19), 7 were partially supported (H2, H4, H5, H8, H9, H10, H18), and 6 were not supported (H12, H13, H14, H16, H17, H20), thus providing partial support for the hypothesised structural model. Cross-sectional findings from this study indicate that HIWPs are positively related to employee engagement, trust in employer, and organisational justice, and negatively related to organisational politics. Procedural justice and organisational politics mediate the relationship between HIWPs and employee engagement, however no empirical evidence was found for the mediating role of the other organisational justice dimensions. Similarly, informational justice mediates the relationship between HIWPs and trust in employer, however no empirical evidence was found for a mediating role for the other organisational justice dimensions or organisational politics.

6.2 Summary of the Main Findings from the Longitudinal Structural Model

Out of 20 hypotheses tested using the longitudinal structural model, 3 were fully supported (H6, H7, H15), 11 were partially supported (H1, H2, H3, H4, H5, H8, H9, H10, H11, H12, H17), and 6 were not supported (H13, H14, H16, H18, H19, H20). The overall findings from the longitudinal structural model were similar to the cross-sectional structural model. The direct effects of HIWPs on employee engagement, trust in employer, organisational justice, and organisational politics remained stable over time, however, some changes in the mediated effects occurred in the longitudinal model. Distributive justice was not a mediator in the relationships

between HIWPs and both employee engagement and trust in employer in the cross-sectional model but emerged as a potential mediator in the longitudinal structural model. Whereas, informational justice was a mediator in the relationship between HIWPs and trust in employer in the cross-sectional model but not in the longitudinal structural model.

Taken as a whole, employees' experiences of HIWPs positively influence engagement and trust. Perceptions of organisational politics and procedural justice appeared as potential mediators in the relationships between HIWPs and employee engagement. However, the effect of HIWPs on trust in employer seems to be direct rather than through perceptions of organisational politics and justice, or there may exist some other theoretical mechanisms through which HIWPs effect trust in employer. Discrepancies between the findings from the cross-sectional and longitudinal structural models noted above are not surprising. Ployhart and Vandenberg (2010) and Pitariu and Ployhart (2010) note that because of the dynamic nature of most organisational and psychological processes, a significant cross-sectional relationship between two variables may not uphold when examined longitudinally. Therefore, the findings from this study support the Maxwell and Cole's (2007) argument that dynamic mediated models are best tested using the longitudinal research designs, as the cross-sectional analysis of mediation may result in biased parameter estimates.

The rest of this chapter is organised as follows. Firstly, the findings from this study on the direct effects of HIWPs on employee engagement, trust in employer, organisational politics, and organisational justice dimensions are discussed. Secondly, the direct effects of organisational politics and organisational justice dimensions, in the context of partial mediation model, on employee engagement and

trust in employer are discussed. Thirdly, the indirect effects of HIWPs on employee engagement and trust in employer through each mediator but in the context of multiple mediators are discussed. In discussing the direct and indirect effects, findings from the prior research are compared when possible. Finally, the strengths and limitations of this study, practical implications, suggestions for future research, and conclusions are presented.

6.3 High-involvement and Employee Engagement

This study subscribed to Kahn's (1990) conceptualisation of employee engagement, "the harnessing of organisation members' selves to their work roles; in engagement people employ and express themselves physically, cognitively, and emotionally during role performances" (p. 694). Employee engagement was measured using the 18-item scale developed by Rich et al. (2010). The findings from this study (H1) indicate that employees' increased exposure to power, information, rewards, and knowledge (HIWPs) is positively related to engagement, as indicated by the longitudinal structural model.

Although it is difficult to find prior research with results that can be directly compared with the results of this study, a number of theoretical perspectives can be used to shed some light on the link between HIWPs and employee engagement. Bailey, Madden, Alfes, and Fletcher (2017) note that most of the researchers have used the job demands – resources (JD-R) framework and social exchange theory to explain the link between systems of human resource management and employee engagement.

The JD-R framework (Bakker & Demerouti, 2007) suggests that when employees are provided job resources they are more likely to be engaged. Examples

of job resources include control or autonomy over job tasks, opportunities to participate in organisational decision making, management initiatives for employees' development and growth, incentives, rewards, and feedback on performance (Bakker & Demerouti, 2007; Bakker et al., 2014). Similarly, based on JD-R framework, Saks (2017) and Saks and Gruman (2014) maintain that physical, social, and psychological job resources including autonomy, performance feedback, and opportunities for development are important predictors of employee engagement. These job resources, to some extent, can be mapped to HIWPs; Benson et al. (2006) point out that high-involvement work systems are comprised of a set of mutually reinforcing HR practices that emphasise providing (a) feedback, incentives, and rewards to employees for their performance, (b) skills and knowledge to make informed decisions, and (c) opportunities to participate in decisions that concern them.

Furthermore, looking through the lens of social exchange theory, Saks (2006) argues that the rules of exchange usually involve reciprocity in that, when employees receive various economic and social resources from their organisations, they are obliged to repay these through greater levels of engagement. Based on social exchange theory, Karatepe (2013a) found that the simultaneous implementation of training, rewards, and empowerment practices fosters employee engagement.

In summary, both JD-R model and social exchange theory provide some explanation for the current findings that HIWPs have a positive association with employee engagement. Employees see the provision of power, information, rewards, and knowledge as job resources to meet job demands. Also, they seem to consider these practices as positive organisational initiatives and reciprocate with more

positive work attitudes such as investing physical, emotional, and cognitive resources to complete their job tasks.

6.4 High-involvement and Trust in Employer

Mayer et al. (1995) defined trust as the willingness of a party to be vulnerable to the actions of another party based on the positive expectations that the other party will not behave opportunistically (Mayer et al., 1995). It was hypothesised that HIWPs are positively related to employees' trust in their organisation (H2). Both the cross-sectional and longitudinal findings from this study indicate that the power (H2a), information (H2b), and knowledge (H2d) attributes of HIWPs are positively associated with employees' trust in their employer. However, no support was found for a significant relationship between rewards and trust in the employer (H2c). Taken together, it would be fair to say that HIWPs, in general, are positively related to employees' trust in their organisation.

The findings from this study are not directly comparable to findings from other studies because the measurement of HR practices vary considerably among studies. For example, based on the social exchange theory, Rubel, Kee, Rimi, and Yusoff (2017) found that a particular set of high-involvement HR practices (competency development, empowerment, fair rewards, recognition, and information sharing) had a positive effect on employees' trust in their organisation ($\beta = .545$, $p < .01$). However, because Rubel et al.'s (2017) operationalised involvement-oriented HR practices as the second-order latent variable comprising five first-order factors mentioned above, their findings do not provide information as to which factor affects or does not affect trust in employer. To measure high-involvement HR practices,

Rubel et al. (2017) used a 14-item scale developed by Yang (2012), which has some similar items to the PIRK measure.

Similarly, following Mayer et al.'s (1995) theory of trust, Searle et al. (2011) found that high-involvement work practices influence employees' perceptions of the trustworthiness of their organisation (ability, benevolence, integrity) and, in turn, these trustworthiness perceptions mediate the relationship between high-involvement work practices and trust in employer. However, Searle et al.'s (2011) measure of high-involvement work systems comprised information sharing, employee participation, job security, performance management, training, and family friendly HR practices, while the PIRK model used in this study is slightly different in that it does not conceptualise and measure job security and family friendly HR practices as involvement-oriented HR practices.

Furthermore, based on social exchange and mutual obligation theories, Gould-Williams (2003) found that HR practices are positively related to trust in employer. Gould-Williams's (2003) 10-item scale of HR practices comprised 7 factors: employment security; selective hiring; performance related pay; training and development; team working; information sharing; and egalitarianism. Gould-Williams's (2003) scale items for performance related pay, training and development, and information sharing were quite similar to PIRK items in the current study. Sample items from Gould-Williams's (2003) study include "I am provided sufficient opportunities for training or development", and "Management involves people when they make decisions that affect them" (p. 40).

Although, the relationship between HIWPs and trust in employer has been rarely investigated, conceptual as well as empirical evidence, though limited, suggests that high-involvement HR practices may promote trusting relationships

between employees and their organisations. One possible explanation for this relationship could be that involvement-oriented HR practices may signal the trustworthiness of the employer, particularly the characteristics integrity and benevolence. Mayer et al. (1995) also suggest that integrity and benevolence of a trustee reduce risk or vulnerability on the part of the trustor. Employees may perceive power sharing, generous investments in employees' skills and knowledge development, and information sharing practices as evidence that the employer cares for the employees' interests.

6.5 High-involvement and Organisational Justice

It was hypothesised that HIWPs (PIRK variables) would be positively associated with employees' perceptions of procedural justice (H3), distributive justice (H4), interpersonal justice (H5), and informational justice (H6). The cross-sectional findings of this study indicate that all four PIRK variables (power, information, rewards, and knowledge) are positively associated with employees' perceptions of procedural justice and informational justice, thus fully supporting hypotheses H3 and H6. Regarding H4 and H5, findings indicate that power, information, and rewards are positively associated with employees' perceptions of distributive justice, however, no support was found for the link between knowledge attribute and distributive justice, thus H4 was only partially supported. Similarly, rewards and knowledge are positively associated with employees' perceptions of interpersonal justice, however, no significant support was found for the association of power and information attributes with distributive justice, thus H5 was also partially supported. In summary, 13 out of 16 hypothesised links between four PIRK

variables and four organisational justice dimensions were supported in the cross-sectional analysis.

The longitudinal structural model tested the similar hypotheses using change scores. The longitudinal structural model's findings are consistent with most of the cross-sectional findings, however, three differences between the models. First, the power attribute was significantly associated with procedural justice in the cross-sectional analysis, however, no support was found for this association when examined longitudinally. Second, power was not associated with interpersonal justice in the cross-sectional model, however, longitudinal findings indicate that power may predict interpersonal justice. Third, rewards were positively associated with procedural justice in the cross-sectional model, however, no support was found for this association in the longitudinal model. In summary, 12 out of 16 hypothesised links between four PIRK variables and four organisational justice dimensions were supported in the longitudinal model.

Taken together, both the cross-sectional and longitudinal findings from this study indicate that employees' greater exposure to HIWPs are positively associated with perceptions of organisational justice. More specifically, HIWPs positively influence employees' perceptions of procedural justice, distributive justice, and informational justice, however, the same cannot be concluded with certainty for interpersonal justice. It might be that perceptions of interpersonal justice are better predicted by supervisors' (or other decision-making authorities') interpersonal behaviours rather than the involvement-oriented HR practices.

Greenberg (2006) also suggests that employees' perceptions of interactional justice (informational and interpersonal) are strongly related to the interpersonal treatment they receive from authority figures rather than organisational policies.

Therefore, improving supervisors' interpersonal skills through training may promote interpersonal justice perceptions (Greenberg, 2006). The findings from this study indicate that, PIRK variables influence perceptions of informational and interpersonal justice. It might be because high involvement work and employment practices emphasise providing a greater level of information through formal and informal team briefings and encourage employee involvement in the business as whole which influence perceptions of interpersonal and informational justice.

Other studies, though cross-sectional, also shed some light on the link between HIWPs and employees' perceptions of organisational justice though used different measures of HR practices. Pare and Tremblay (2007) tested a two-step path model and found that high-involvement HR practices positively influence employees' perceptions of procedural justice, which in turn lead to commitment and organisational citizenship behaviour, which lead to turn-over intentions. Although not exactly the same, Pare and Tremblay (2007) included recognition, empowerment, competence development, fair rewards, and information sharing as involvement-oriented HR practices, which are quite similar to the PIRK variables in the current study.

Similarly, Wu and Chaturvedi (2009) found that comprehensive training, internal career opportunities, empowerment, performance related pay, and formal appraisal practices are all positively associated with perceived procedural justice. Meyer and Smith (2000) found that the career development, training, performance appraisal, rewards and benefits practices are positively associated with perceived procedural justice. Kuvaas (2008) also found that training, career development, and performance appraisal practices are positively associated with perceived procedural

justice, whereas, career development and performance appraisal were positively related with interactional justice.

In summary, the findings from this study indicate that HIWPs are positively associated with employees' perceptions of organisational justice. This is consistent with Lawler's (1986) theoretical argument that employees are not willing to put forth increased effort or accept suggestions to improve systems at their workplace if they do not feel that they are justly rewarded. Nevertheless, the empirical evidence for the link between HIWPs and perceptions of organisational justice remains thin. Therefore, the findings from this study contribute, not only in the area of human resource management, but also in the justice literature by suggesting that organisational practices that put decision-making power in the hands of workers, and provide information and feedback on performance, as well as fair reward practices, can be important antecedents of organisational justice. However, as the evidence is limited, further longitudinal studies with all four justice dimensions may provide stronger conclusions.

6.6 High-involvement and Organisational Politics

As stated in Chapter 2, organisational politics refers to illegitimate self-serving behaviours, often enacted behind the scenes, designed to benefit, protect or enhance self-interest without regard for the welfare of others or the organisation (Mintzberg, 1985; Ferris et al., 1989). Examples of political behaviours include taking credit for others' work, backstabbing, coalition building, and rewarding employees based on subjective criteria such as favouritism (Chang et al., 2009). It was hypothesised that employees' experiences of HIWPs are negatively associated with their perceptions of organisational politics (H7). The findings from both cross-

sectional and longitudinal structural models indicate that all four PIRK variables are negatively associated with perceptions of organisational politics, thus fully supporting this hypothesis.

Although it is difficult to find any other study that has examined the influence of HIWPs on employees' perceptions of organisational politics, some studies do reveal that the features of employee-involvement management have the potential to lower the perceptions of organisational politics. For example, Aryee et al. (2004) found that workers' participation in organisational decision making (decentralisation) is negatively associated with their perceptions of organisational politics. Similarly, O'Connor and Morrison (2001) found that employees' greater control over their jobs is negatively associated with perceptions of organisational politics. Both employees' participation in organisational decision making and greater control over their jobs, are central tenets of employee involvement management.

Similarly, drawing on the job characteristic model, Ferris et al. (2017) suggest that skill variety, autonomy, and feedback will reduce political perceptions because employees' greater control and access to information reduces uncertainty, ambiguity, and their dependence on others. Rosen et al. (2006) also found that a work environment comprised of formal and informal feedback is negatively associated with perceptions of organisational politics. It is important to note that the two distinct features of HIWPs are the job-level involvement and organisational-level involvement, where the former is achieved through job control/autonomy and the latter is achieved through seeking employees' voice in organisational decision making (Wood & Wall, 2007).

In summary, the findings from this study indicate that employees' involvement in decision making, performance-based rewards and incentives, training

opportunities to enhance skills and knowledge, access to information regarding organisational policies, and feedback on individual performance can reduce workers' perceptions of organisational politics. Such attributes of HIWPs may influence perceptions of politics through reducing the uncertainty and ambiguity often present in Taylorist forms of work organisation where only the top management possess the information and decision-making power. Ferris et al. (2017) and Rosen et al. (2014) note that perceptions of organisational politics thrive in work environments characterised by uncertainty because employees are unsure which behaviours will be rewarded. In such work environments, employees may engage in political behaviours such as developing personal ties with decision making authorities to secure a greater share of organisational resources (Frieder et al., 2015).

6.7 Organisational Justice and Employee Engagement

It was hypothesised that employees' perceptions of procedural (H8a), distributive (H8b), interpersonal (H8c), and informational justice (H8d) would be positively associated with employee engagement. The cross-sectional findings indicate that procedural justice is the only dimensions which is positively associated with employee engagement. Whereas, the findings from the longitudinal structural model indicate that both procedural justice and distributive justice are positively associated with employee engagement. However, no support was found for the influence of interpersonal and informational justice on employee engagement.

An emerging body of research has also demonstrated that employees' perceptions of organisational justice are positively associated with engagement, however studies thus far not only have provided mixed results but also vary in their conceptualisation and measurement of justice construct. For example, Park et al.

(2016) and Lyu (2016) found a positive association between organisational justice and engagement, however both studies conceptualised justice as a second-order latent construct comprised three first-order variables: procedural, distributive, and interactional justice. Therefore, both Park et al. (2016) and Lyu (2016) provide no information as to which justice dimension predicts or does not predict engagement. Bies (2005) and Colquitt (2001) also suggest that researchers should include all four justice dimensions in one study, and conceptualising justice as four first-order factors provide more insights to examine the unique variance explained by each dimension.

Strom, Sears, and Kelly (2014) found that both procedural and distributive justice are positively associated with work engagement; they did not include interpersonal and informational justice dimensions. Similarly, Haynie, Mossholder, and Harris (2016) examined the impact of procedural and distributive justice on engagement, finding that distributive justice, but not procedural justice, influenced employee engagement. Karatepe (2011) conducted a study in the hospitality industry and found that procedural justice is positively associated with employee engagement; he did not include distributive, interpersonal and informational classes of justice in his study. Based on Kahn's (1990) theoretical explanations, Saks (2006) included procedural and distributive justice in his model and found that neither procedural justice nor distributive justice predict engagement, however, he found a weak relationship between procedural justice and engagement ($\beta = 0.18, p < 0.10$).

Ghosh, Rai, and Sinha (2014) conducted a study in the Indian context and found that, procedural, distributive, and interactional justice are positively associated with employee engagement. Similarly, both Inoue et al.'s (2010) and Siltaloppi, Kinnunen, and Feldt's (2009) studies provide support that procedural justice and interactional justice are positively associated with employee engagement. However,

both of these studies conceptualised interpersonal and informational justice as a single dimension (interactional justice); where Siltaloppi et al's (2009) measure of interactional justice comprised only three items.

In summary, the overall findings from this study and those cited above support the argument that perceptions of organisational justice predict employee engagement. However, more research is needed to find out which justice dimensions are more powerful predictors of engagement, because the limited research on the link between justice and engagement has provided mixed results. Nevertheless, there are theoretical reasons to believe that organisational justice will predict employee engagement. Crawford et al. (2014) suggest that justice perceptions are associated with psychological safety which, in turn, predicts engagement by increasing equity and addressing employees' concerns over the distribution of power, resources, and authority. Employees are more likely to be engaged when they are treated with warmth and respect, and also when the distribution of organisational resources is fair (Macey, Schneider, Barbera, & Young, 2009).

6.8 Organisational Justice and Trust in Employer

It was hypothesised that procedural (H9a), distributive (H9b), interpersonal (H9c), and informational justice (H9d) would be positively associated with trust in employer. The cross-sectional findings indicate that interpersonal and informational justice are positively associated with trust in employer, but no support was found for procedural and distributive justice dimensions. The findings from the longitudinal structural model indicate that distributive justice is the only dimension which is positively associated with trust in employer, with no support found for the other three justice dimensions. In summary, the findings from this study indicate that

organisational justice may not be associated with trust in employer. It is possible that a longitudinal panel design with three or more waves of data could have provided better insights, as some indications for the significant relationships between justice and trust were found in the present study, though they were inconsistent over the two-time periods.

Results relating to the impact of justice on trust in this study are similar to prior longitudinal studies with two-time periods. For example, Kernan and Hanges (2002) examined both cross-sectional and longitudinal relationships between three justice dimensions and employee trust (distributive justice was not included in their study). At time 1, they found that procedural, interpersonal, and informational justice were associated with trust in management, however, when examined longitudinally, only procedural justice was associated with trust in management. Similarly, Colquitt and Rodell (2011) conducted a longitudinal field study with two-time periods and found that, out of four justice dimensions, informational justice is the only justice dimension which predicts ($\beta = 0.18, p < .05$) trust in supervisor.

Nevertheless, other cross-sectional studies provide strong support for the positive link between justice and trust. For example, Begley, Lee, and Hui (2006) found that both procedural and distributive justice are positively related to trust in the organisation, however, because they did not include other justice dimensions, their study provides no information regarding the relationship between interactional justice and trust. In another study, Aryee et al. (2002) found that procedural, distributive, and interactional justice (interpersonal and informational) predict trust, however, they included trust in supervisor and trust in organisation as two separate variables, and found that interactional justice is more strongly related to trust in supervisor than trust in the organisation.

The mixed result from the studies cited above and the inconsistency in cross-sectional and longitudinal findings from the current study, make interpretation difficult. Nevertheless, it might be that interpersonal and informational justice better predict trust in supervisor and procedural and distributive justice better predict trust in the organisation. If this is the case, then both distributive and procedural justice should have predicted trust in employer in the present study, though the longitudinal structural model provides some support for the link between distributive justice and trust in the organisation.

In theorising a justice-trust relationship, both Rupp and Cropanzano's (2002) multifoci model of justice and Lavelle, Rupp, and Brockner's (2007) target similarity model suggest that employees make distinct evaluations regarding the fairness of various targets at their work place, for instance supervisors, co-workers, and the organisation; and in turn their attitudes and behaviours are influenced by the perceived fairness of each target. For example, when employees perceive procedures to be fair, they are more likely to trust their organisation because procedural justice corresponds to the organisation. On the other hand, when employees perceive interpersonal and informational treatment to be fair, they are more likely to trust in the supervisor because such perceptions of justice correspond to the supervisor.

Two recent meta-analytic studies have provided mixed support for the multifoci approach to justice. In their meta-analytic study, Colquitt et al. (2013) found no support for the supervisor-focussed justice outcomes and organisation-focussed justice outcomes and concluded that researchers should pay less attention to operationalise target-specific justice and outcomes in research. However, in another meta-analytic study, Rupp et al. (2014) found that perceptions of interpersonal and informational justice predict supervisor-focused outcomes such as trust in the

supervisor; and perceptions of procedural justice predict organisation-focused outcomes such as trust in the organisation.

Although the findings from the two meta-analytical studies discussed above provide mixed results, an emerging body of research (e.g., Masterson et al., 2000; Rupp & Cropanzano, 2002; Lavelle et al., 2007) suggests that the multifoci approach in the study of organisational justice holds some merit. Therefore, including trust in supervisor along with trust in organisation in the present study may have provided more insights regarding the relationship between justice dimensions and trust in employer.

6.9 Organisational Politics and Employee Engagement

It was hypothesised that employees' perceptions of organisational politics would be negatively associated with employee engagement such that low perceptions of politics would be associated with high engagement and high perceptions of politics would be associated with low engagement (H10a). Both cross-sectional and longitudinal findings supported this hypothesis.

Over the past three decades, a large number of studies have examined the impact of organisational politics on a variety of work-related outcomes, however scholars have more recently begun to examine the impact of politics on employee engagement. For example, Karatepe (2013b) gathered data from hotel employees ($n = 231$) working in Iran and found that perceptions of organisational politics are negatively related to employee engagement as well as other constructs such as organisational commitment and extra role performance. Agarwal (2014) conducted a study in the Indian context ($n = 302$) and found that perceptions of organisational politics are negatively associated with employee engagement and innovative work

behaviours, and positively associated with intentions to quit. In another study, Kane-Frieder et al. (2014) found that perceptions of politics are negatively associated with employee engagement, job satisfaction, and citizenship behaviour.

In summary, the findings from this study and those cited above provide evidence that organisational politics is a hindrance stressor (LePine et al., 2005) and it has a negative relationship with both employee and employer outcomes. Drawing on the JD-R framework, Crawford et al. (2010) also suggest that organisational politics is one of the hindrance demands that make employees believe that no reasonable amount of effort will be sufficient to achieve meaningful outcomes, therefore, when they are faced with highly political work environment, they withdraw their emotional, cognitive, and physical resources. In other words, an individual who perceives their work environment to be highly political in nature, has reason to believe that hard work will not necessarily be rewarded. This suggests that, though organisational politics is an omnipresent feature of working life, to promote engagement, managers must attempt to minimise political behaviour in the workplace.

6.10 Organisational Politics and Trust in Employer

It was hypothesised that employees' perceptions of organisational politics would be negatively associated with their trust in employer such that low perceptions of politics would be associated with high trust in employer, and high perceptions of politics would be associated with low trust in employer (H10b). Neither cross-sectional nor longitudinal findings supported this hypothesis. The theoretically based argument offered was that, when decision making in an organisation is based on power, personal ties, and favouritism, rather than merit, employees may perceive

their organisation as less trustworthy; consequently, employees were expected to have less trust in their organisation. Although this argument holds conceptual merit, it was not supported by the data in the current study.

Unfortunately, the paucity of published studies on the relationship between organisational politics and trust in employer precludes systematic comparison and interpretation of the findings from this study. In a recent meta-analysis, Bedi and Schat (2013) found that perceptions of organisational politics were negatively related to trust in employer. However, it is important to note that their meta-analytical findings were only based on 3 published and 4 unpublished studies. In another study, Albrecht (2006) gathered data from 306 employees working in a large Australian public sector medical hospital and found that the indirect relationship between organisational politics and trust in employer (through perceived organisational support) was stronger ($\beta = -.35, p < .001$) than the direct relationship ($\beta = -.18, p < .01$).

Similarly, Muhammad (2007) and Poon (2003) both found a negative relationship between *trust climate* and perceptions of organisational politics, however, both studies operationalised *trust climate* as the antecedent of perceptions of politics, not the outcome. In addition, both studies used a 4-item scale to measure trust climate in which only one item was related to trust in employer whereas other three items were related to trust in supervisor and co-workers.

Nevertheless, trust is a complex subject and there could be at least two reasons why perceptions of politics were not related to trust in employer in the expected way. First, in theorising trust, Mayer et al. (1995) suggest that beside trustworthiness characteristics of a trustee (ability, benevolence, and integrity), the trustor's propensity to trust others is an important factor in developing trust.

Propensity to trust refers to the general willingness of someone to trust others (Mayer et al., 1995). The factors that influence people's propensity to trust others include personality, experiences, and culture (Schoorman, Mayer, & Davis, 2007). In a meta-analytic study, Colquitt, Scott, and LePine (2007) found that trust propensity is independent of trustworthiness and accounts for unique variance even after controlling for perceptions of trustworthiness. Bianchi and Brockner (2012) made the same argument that beside organisational processes people's propensity to trust others also influences their perceptions of fairness such that people with a high propensity to trust others see events as fair. In summary, it might be this study participants had a general propensity to trust others so that, despite having perceptions of politics, they still reported trust in their organisations.

Another reason could be that both organisational politics and organisational justice were simultaneously operationalised as mediators in the relationship between HIWPs and trust in employer. Some early efforts on the simultaneous examination of politics and justice perceptions suggest that perceptions of justice can buffer the negative effects of perceptions of politics on employee attitudes and behaviours. For example, Harris et al. (2007) found that the positive relationship between perceptions of politics and turnover intentions are weak when procedural and distributive justice are high. In other words, when employees perceived high-level of procedural and distributive justice, the impact of perceptions of politics on turnover intentions were weak. Similarly, the negative relationship between perceptions of politics and job satisfaction are weak when procedural and distributive justice are high (Harris et al., 2007). In another study, Byrne (2005) also found that the positive relationship between perceptions of politics and turnover is weak when the perceived procedural

justice is high. Therefore, it might be that perceived justice has altered the relationship between perceptions of politics and trust in employer.

6.11 HIWPs and Employee Engagement – the Mediating Role of Organisational Justice and Politics

It was hypothesised that the relationship between HIWPs and employee engagement would be mediated through employees' perceptions of procedural justice (H11), distributive justice (H12), interpersonal justice (H13), informational justice (H14) justice, and organisational politics (H15). The cross-sectional findings indicate that procedural justice and organisational politics mediate the relationships between HIWPs (all four PIRK variables) and employee engagement, however, no support was found for the mediating role of other three justice dimensions – distributive, interpersonal, and informational justice.

The findings from the longitudinal model indicate that, in addition to procedural justice and organisational politics, distributive justice can also mediate the relationship between HIWPs and employee engagement. However, the longitudinal model does not support the mediating role of procedural justice in the relationship between the power variable and engagement. Similarly, neither the cross-sectional model nor the longitudinal model supports the hypothesis that distributive justice plays a mediating role in the relationship between the knowledge variable and employee engagement.

Nevertheless, HIWPs are based on the idea that the four attributes of high-involvement, power, information, rewards, and knowledge, work together to create the kind of synergy necessary for true involvement (Vandenberg et al., 1999; Lawler, 1986). Therefore, if taken as a whole, it can be inferred from the overall findings of this study that procedural justice and organisational politics can be potential

mediators in the relationship between HIWPs and employee engagement. The same cannot be said for the distributive justice, however, as no support was found cross-sectionally. Three (or more than three) waves of data collection might have provided more insights regarding the mediating role of distributive justice, interpersonal justice, and informational justice in the relationship between HIWPs and employee engagement.

6.12 HIWPs and Trust in Employer – the Mediating Role of Organisational Justice and Politics

It was hypothesised that the relationship between HIWPs and trust in employer will be mediated through employees' perceptions of procedural justice (H16), distributive justice (H17), interpersonal justice (H18), informational justice (H19), and organisational politics (H20). The cross-sectional findings indicate that informational justice mediates the relationships between all four PIRK variables and trust in employer, and interpersonal justice mediates the relationship between rewards and knowledge variables of HIWPs and trust in employer. Whereas, the findings from the longitudinal model indicate that distributive justice mediates the relationships between power, information, and rewards attributes of HIWPs and trust in employer.

Taken together, a more stringent view of the findings of this study suggests that there is little evidence that perceptions of justice and politics can mediate the relationship between HIWPs and trust, however, the total effect (direct + indirect effect) of each PIRK variable on trust in employer was larger than the only direct effect. This implies that the perceptions of justice and politics mediate only a fraction of the relationship between HIWPs and trust in employer and there may exist some

other theoretical mechanisms through which HIWPs exert their influence on trust in employer.

Nevertheless, this may also be because employees' greater exposure to HIWPs have a direct impact (as the results suggest) on employees' trust in their employer. As social exchange theory suggests, a positive initiating action would increase trust (Cropanzano et al., 2017), employees might see delegation and sharing of power, provision of greater information, merit-based rewards, and investment in their skills and knowledge as positive management actions and reciprocate with greater trust in their employer. Relational or group value models of justice also suggest that opportunities to participate in organisational decisions signals to people that they are valued members of an organisational group which fosters trust in authorities or organisations (Blader & Tyler, 2015).

6.13 Strengths and Limitations

This study has several strengths and limitations that should be noted. Perhaps, the biggest strength of this study is the longitudinal design with two data collection times. The longitudinal data allowed a more rigorous test of mediation and causal ordering indicating with increased certainty that HIWPs lead to organisational politics and organisational justice, which in turn lead to trust in employer and employee engagement. Findings from the cross-sectional model were supported by the longitudinal structural model. However, to draw definitive causal inference in the hypothesised direction, three or more than three wave-data may have added more confidence (Ployhart & Vandenberg, 2010). While, Hair et al. (2016) note that the only way to draw definitive causal inferences is to use experimental designs in which the random assignments can be used to eliminate alternative explanations.

One limitation of this study could be the extent to which the findings can be generalised to a broader population as the data were collected only from the private banking sector in Pakistan. The private banking sector in Pakistan has its' own peculiarities that could have affected the work-related attitudes and behaviours of employees and ultimately the findings from this study. For example, employees working in the private banking sector, like many other private sectors, experience less job security, compared to employees working in the public sector. As a result, private banking sector employees in Pakistan usually develop close relationships with their supervisors to show their commitment to them and the organisation. Whereas, in more developed and industrialised countries, such activities may be perceived as illegitimate political behaviours directed toward self-interest at the cost of others. Similarly, because of the collectivistic nature of Pakistani culture, employees' reactions to injustice in Pakistan may be weaker compared to other Western and North American countries.

However, it is important to note that the private banking sector in Pakistan operates much like other for-profit organisations in Pakistan as well as other Western countries. The banking sector in Pakistan is highly competitive, human resource management practices are much like other private sector organisations, and respondents' understanding of employment relations may not significantly differ from those working in other industries in Pakistan and Western countries. Nevertheless, Highhouse and Gillespie (2009) note that the most common limitation mentioned in studies is the issue of generalisability due to the specific characteristics of sample, however, generalisability is not only contingent to sample characteristics but also other factors. For example, valid theoretical inference is more important in

generalising finding from one study to other settings than sample characteristics (Highhouse & Gillespie, 2009).

Another limitation of this study is the possibility that the observed results are due to the influence of common method variance (CMV), as all data were obtained using the same source, that is, employees' self-report. It is widely believed that when data are collected using the same source, the observed relationships among variables are either inflated or deflated (usually inflated) due to the presence of CMV (Podsakoff et al., 2012). However, CMV is a complex methodological problem as there is a little to no consensus on the issues related to when data is or is not susceptible to CMV, whether CMV impacts all variables in the same manner, and the amount of method variance they contain (Spector, 2006; Spector, Rosen, Richardson, Williams, & Johnson, 2017). To some, CMV is a potential problem in empirical research and can lead to erroneous conclusions (Podsakoff et al., 2003), while others believe that the issue of CMV has reached at the status of an "urban legend" that is "both an exaggeration and over simplification of true state of affairs" (Spector, 2006, p. 230).

Although CMV is a controversial topic in some respects, its potential to distort research finding cannot be ignored. Therefore, at the time of data collection and questionnaire design, several preventive measures were applied and post-hoc confirmatory factor analyses were carried out to detect its' presence in the data (see Chapter 3 for details about the preventive strategies and post-hoc test results). Furthermore, the findings from the longitudinal structural model are remarkably consistent with the findings from the cross-sectional data, giving confidence that the common method bias did not influence the findings from the present study.

One possible strategy to control for CMV could have been to collect data from different sources (Podsakoff et al., 2012). However, it is hard to imagine who else, other than employees themselves, could have been more informed of their experiences of HIWPs, perceptions of organisational politics, organisational justice, the state of work engagement (physical, cognitive, and emotional), and the level of trust in the organisation. In a similar vein, Spector et al. (2017) note that while CMV might inflate the correlations among observed variables, uncommon method variance (UMV), on the other hand, can attenuate those observed correlations due to extraneous influences on the measured variables. Therefore, the presence of both CMV and UMV can equally lead to measurement error and erroneous conclusions (Spector et al., 2017).

6.14 Practical Implications

Despite the limitations mentioned above, the results of this study offer some important implications to those who implement and design organisational policies and practices and believe fairness in the workplace matters. If one's goal is to promote workplace justice, have employees who not only bring their hands but also their hearts and heads to work, and develop trust-based exchange relationships between employees and their employer, then employee involvement approach seems the right choice. Given the importance of fairness in organisational decisions as a fundamental requirement for the effective functioning of an organisation, HIWPs have the potential to enhance justice perceptions which in turn influence employees' work-related attitudes and behaviours.

Second, although it is hardly possible to completely eradicate political behaviours in organisations because people differ in their attitudes and behaviours,

those who have the authority to make organisational decisions can discourage employees in engaging political behaviours by adhering to justice rules. The results of this study suggest that involving employees in decisions that concern to them, providing information about organisational policies and procedures, rewarding them fairly for their contribution, and providing training and information to make informed and competitive decisions can lower perceptions of organisational politics.

6.15 General Suggestions for Future Research

Although this study used a two-wave longitudinal design, in order to draw stronger causal conclusions, it would have been desirable to collect data three or more times. Given that a true experimental design is hardly possible in behavioural sciences, a complete longitudinal panel design to test a dynamic mediated model demands two time lags (neither too short nor too long) at each wave such that there is one time lag between the measures of independent and mediator variables and another time lag between the measures of mediator and dependent variables (Cole & Maxwell, 2003; Maxwell & Cole, 2007, Ployhart & Vandenberg, 2010). Second, to measure change, data on all variables should be gathered at least three times (Ployhart & Mackenzie, 2015). This implies that, to have three wave longitudinal panel data to test mediated model, the participants should be willing to complete similar surveys several times. Perhaps, for the very legitimate reasons that the participants would be tired of completing so many identical surveys, expected drop in sample size at each wave, and the possibility of other confounding variables, both cross sectional and two-wave longitudinal designs are still the norm in behavioural studies (Maxwell & Cole, 2007). Nevertheless, this remains a rich agenda for future

research as it is important to find mechanisms through which systems of human resource management transmit their effects on employees and employer outcomes.

A second suggestion for future research is to collect data from multiple industries as the specific characteristics of the private banking sector limit the generalisability of the findings of this study. Therefore, future studies should include a more heterogeneous sample to substantiate the results of this study. Particularly, gathering data from manufacturing industries is highly desirable due to the significant differences in organisational and work characteristics between the manufacturing and service sectors.

6.16 Conclusions

There is a growing body of literature suggesting that employee-involvement management is associated with a number of work-related attitudes and behaviours beneficial for both employees and their employing organisations. However, the evidence regarding ‘how’ such associations come about remains limited. The mutual gains perspective of HRM implies that HRM should benefit both employees and their organisations, however, research to date has either provided limited or conflicting evidence.

Guided by this gap in the literature, the findings from this study contribute to the extant body of research by suggesting that employees’ greater exposure to high-involvement HR practices are negatively associated with their perceptions of organisational politics and positively associated with organisational justice, trust in employer, and employee engagement. These findings are important as they indicate that HIWPs have promising benefits for both employees and their organisations thus supporting the mutual gains perspective of HRM.

Regarding the “how” question of the relationship between HIWPs and employee outcomes, the findings from this study indicate that perceptions of procedural justice and organisational politics mediate the relationship between HIWPs and employee engagement. However, weak evidence was also found for the mediating role of perceptions of organisational justice and politics in the relationships between HIWPs and trust in employer. It may be that, either HIWPs have a strong direct positive association with trust in employer, or there may exist some other theoretical mechanisms (other than perceptions of politics and justice) which transmits the effects of HIWPs on trust in employer.

Another important finding of this study is that, although perceptions of justice and politics are two distinct constructs, it is unlikely that both exist either at high or at low levels simultaneously. Or, in other words, when employees perceive high level of organisational justice they ultimately perceive low levels of organisational politics and vice versa. Nevertheless, the findings do suggest that perceptions of organisational politics and justice are ubiquitous in organisations and remain an important topic to study as fairness is hardwired in human brain.

References

- Abbas, M., Raja, U., Darr, W., & Bouckennooghe, D. (2014). Combined effects of perceived politics and psychological capital on job satisfaction, turnover intentions, and performance. *Journal of Management, 40*(7), 1813-1830. doi:10.1177/0149206312455243
- Adams, J. S. (1963). Towards an understanding of inequity. *The Journal of Abnormal and Social Psychology, 67*(5), 422-436. doi:10.1037/h0040968
- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267–299). New York, NY: Academic Press. doi:10.1016/S0065-2601(08)60108-2
- Agarwal, U. A. (2014). Linking justice, trust and innovative work behaviour to work engagement. *Personnel Review, 43*(1), 41-73. doi:10.1108/PR-02-2012-0019
- Agarwal, U. A. (2016). Examining perceived organizational politics among Indian managers: Engagement as mediator and locus of control as moderator. *International Journal of Organizational Analysis, 24*(3), 415-437. doi:10.1108/IJOA-07-2014-0786
- Albrecht, S. (2006). Organizational politics: Affective reactions, cognitive assessments and their influence on organizational commitment and cynicism toward change. In E. Vigoda-Gadot & A. Drory (Eds.), *Handbook of organizational politics* (pp. 230–252). Cheltenham, UK: Edward Elgar.
- Allison, P. D. (1990). Change scores as dependent variables in regression analysis. *Sociological Methodology 20*(1), 93-114.
- Ambrose, M. L., & Schminke, M. (2003). Organization structure as a moderator of the relationship between procedural justice, interactional justice, perceived

organizational support, and supervisory trust. *Journal of Applied Psychology*, 88(2), 295-305. doi:10.1037/0021-9010.88.2.295

Ambrose, M. L., & Schminke, M. (2009). The role of overall justice judgments in organisational justice research: A test of mediation. *Journal of Applied Psychology*, 94(2), 491-500. doi:10.1037/a0013203

Andrews, M. C., & Kacmar, K. M. (2001). Discriminating among organizational politics, justice, and support. *Journal of Organizational Behavior*, 22(4), 347-366. doi:101002/job.92

ANZSCO. (2013). *Group 5521 bank workers*. Retrieved on February 4, 2016 from <http://www.abs.gov.au/ausstats/abs@.nsf/Product+Lookup/1220.0~2013,+Vrsion+2~Chapter~UNIT+GROUP+5521+Bank+Workers>

Appelbaum, E., Bailey T., Berg P., & Kalleberg, A. (2000) *Manufacturing advantage: Why high-performance work systems pay off*. Ithaca, NY: ILR Press.

Aryee, S., Budhwar, P. S., & Chen, Z. X. (2002). Trust as a mediator of the relationship between organizational justice and work outcomes: Test of a social exchange model. *Journal of Organizational Behavior*, 23(3), 267-285. doi:10.1002/job.138

Aryee, S., Chen, Z. X., & Budhwar, P. S. (2004). Exchange fairness and employee performance: An examination of the relationship between organizational politics and procedural justice. *Organizational Behavior and Human Decision Processes*, 94(1), 1-14. doi:10.1016/j.obhdp.2004.03.002

- Ashforth, B. E., & Lee, R. T. (1990). Defensive behavior in organizations: A preliminary model. *Human Relations*, *43*(7), 621-648.
doi:10.1177/001872679004300702
- Baer, M. D., & Colquitt, J. A. (2018). Why do people trust? Moving toward a more comprehensive consideration of the antecedents of trust. In R. H. Searle., A.I. Nienaber., & S. B. Sitkin (Eds.), *The Routledge companion to trust* (pp.163-182). Abingdon: Routledge.
- Bailey, C., Madden, A., Alfes, K., & Fletcher, L. (2017). The meaning, antecedents and outcomes of employee engagement: A narrative synthesis. *International Journal of Management Reviews*, *19*(1), 31-53. doi:10.1111/ijmr.12077
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, *22*(3), 309-328.
doi:10.1108/02683940710733115
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD–R approach. *Annu. Rev. Organ. Psychol. Organ. Behav.*, *1*(1), 389-411. doi:10.1146/annurev-orgpsych-031413-091235
- Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, *20*(1), 4-28. doi:10.1080/1359432X.2010.485352
- Bedi, A., & Schat, A. C. (2013). Perceptions of organizational politics: A meta-analysis of its attitudinal, health, and behavioural consequences. *Canadian Psychology*, *54*(4), 246-259. doi:10.1037/a0034549

- Begley, T. M., Lee, C., & Hui, C. (2006). Organizational level as a moderator of the relationship between justice perceptions and work-related reactions. *Journal of Organizational Behavior*, 27(6), 705-721. doi:10.1002/job.388
- Benson, G. S., & Lawler, E. E. (2003). Employee involvement: Utilization, impacts and future prospects. In D. Holman, T. Wall, C. Clegg, P. Sparrow, & A. Howard, (Eds.), *The new workplace: A guide to the human impact of modern working practices* (pp. 155-173). Chichester. Wiley.
- Benson, G. S., Kimmel, M., & Lawler, E. E. (2013). Adoption of employee involvement practices: Organizational change issues and insights. In A. B. (Rami) Shani., W. A. Pasmore., R. W. Woodman., & D. A. Naumair (Eds.), *Research in organizational change and development*, (Vol. 21, pp. 233-257). Emerald Group Publishing Limited.
- Benson, G. S., Young, S. M., & Lawler, E. E. (2006). High-involvement work practices and analysts' forecasts of corporate earnings. *Human Resource Management*, 45(4), 519-537. doi:10.1002/hrm.20130
- Bentler, P. M. (1980). Multivariate analysis with latent variables: Causal modelling. *Annual Review of Psychology*, 31(1), 419-456.
doi:10.1146/annurev.ps.31.020180.002223
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238-246. doi:10.1037/0033-2909.107.2.238
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588-606.
doi:10.1037/0033-2909.88.3.588

- Bergh, D. D., & Fairbank, J. F. (2002). Measuring and testing change in strategic management research. *Strategic Management Journal*, 23(4), 359-366.
doi:10.1002/smj.232
- Bharathi, K. G. (2010). The intellectual capital performance of banking sector in Pakistan. *Pakistan Journal of Commerce & Social Sciences*, 4(1), 84-99.
- Bianchi, E. C., & Brockner, J. (2012). In the eyes of the beholder? The role of dispositional trust in judgments of procedural and interactional fairness. *Organizational Behavior and Human Decision Processes*, 118(1), 46-59.
doi:10.1016/j.obhdp.2011.12.005
- Bies, R. J. (2001). Interactional (in)justice: The sacred and the profane. In J. Greenberg & R. Cropanzano (Eds.), *Advances in organisational justice* (pp. 89-118). Stanford, CA: Stanford University Press.
- Bies, R. J. (2005). Are procedural justice and interactional justice conceptually distinct? In J. Greenberg & J. A. Colquitt (Eds.), *Handbook of organizational justice* (pp. 85-112). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bies, R. J. (2015). Interactional justice: Looking backward and looking forward. In R. Cropanzano & M. L. Ambrose (Eds.), *The Oxford handbook of justice in the workplace* (pp. 89–107). Oxford, UK: Oxford University Press.
- Bies, R. J., & Shapiro, D. L. (1987). Interactional fairness judgments: The influence of causal accounts. *Social Justice Research*, 1(2), 199-218.
doi:10.07/BF01048016
- Blader, S. L., & Tyler, T. R. (2015). Relational models of procedural justice. In R. Cropanzano & M. L. Ambrose (Eds.), *The Oxford handbook of justice in the workplace* (pp. 351–370). Oxford, UK: Oxford University Press.
- Blau, P. M. (1964). *Exchange and power in social life*. New York, NY: Wiley.

- Bobocel, D. R., & Gosse, L. (2015). Procedural justice: A historical review and critical analysis. In R. Cropanzano & M. L. Ambrose (Eds.), *The Oxford handbook of justice in the workplace* (pp. 51–88). Oxford, UK: Oxford University Press.
- Bockerman, P., Bryson, A., & Ilmakunnas, P. (2012). Does high involvement management improve worker wellbeing? *Journal of Economic Behavior & Organisation*, *84*(2), 660-680. doi:10.1016/j.jebo.2012.09.005
- Bollen, K. A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods & Research*, *17*(3), 303-316.
doi:10.1177/0049124189017003004
- Bollen, K. A., & Curran, P. J. (2004). Autoregressive latent trajectory (ALT) models: A synthesis of two traditions. *Sociological Methods & Research*, *32*(3), 336-383. doi:10.1177/0049124103260222
- Bollen, K. A., & Curran, P. J. (2006). *Latent curve models: A structural equation perspective*. New Jersey, NJ: John Wiley & Sons.
- Bouckennooghe, D., Zafar, A., & Raja, U. (2015). How ethical leadership shapes employees' job performance: The mediating roles of goal congruence and psychological capital. *Journal of Business Ethics*, *129*(1), 251-264.
doi:10.1007/s10551-014-2162-3
- Bowen, D. E., Gilliland, S. W., & Folger, R. (1999). HRM and service fairness: How being fair with employees spills over to customers. *Organizational Dynamics*, *27*(3), 7-23. doi:10.1016/S0090-2616(99)90018-9

- Boxall, P. (2013). Mutuality in the management of human resources: Assessing the quality of alignment in employment relationships. *Human Resource Management Journal*, 23(1), 3-17. doi:10.1111/1748-8583.12015
- Boxall, P., Guthrie, J. P., & Paauwe, J. (2016). Editorial introduction: Progressing our understanding of the mediating variables linking HRM, employee well-being and organisational performance. *Human Resource Management Journal*, 26(2), 103–111. doi:10.1111/1748-8583.12104
- Boxall, P., & Macky, K. (2009). Research and theory on high-performance work systems: Progressing the high-involvement stream. *Human Resource Management Journal*, 19(1), 3-23. doi:10.1111/j.1748-8583.2008.00082.x
- Boxall, P., & Macky, K. (2014). High-involvement work processes, work intensification and employee well-being. *Work, Employment & Society*, 28(6), 963-984. doi:10.1177/0950017013512714
- Boxall, P. & Macky, K. (2016). High performance work systems: Involvement versus intensification. In M. Martinko, N. M. Ashkanasy, & R. Bennett (Eds.), *Understanding the high performance workplace: The line between motivation and abuse* (pp. 85–102). SIOP Organizational Frontiers Series, New York and London: Routledge.
- Boxall, P., Hutchison, A., & Wassenaar, B. (2015). How do high-involvement work processes influence employee outcomes? An examination of the mediating roles of skill utilisation and intrinsic motivation. *The International Journal of Human Resource Management*, 26(13), 1737-1752. doi:10.1080/09585192.2014.962070
- Brockner, J. (2010). *A contemporary look at organizational justice: Multiplying insult times injury*. New York, NY: Routledge.

- Bryson, A., Forth, J., & Kirby, S. (2005). High-involvement management practices, trade union representation and workplace performance in Britain. *Scottish Journal of Political Economy*, 52(3), 451-491. doi:10.1111/j.0036-9292.2005.00352.x
- Butts, M. M., Vandenberg, R. J., DeJoy, D. M., Schaffer, B. S., & Wilson, M. G. (2009). Individual reactions to high involvement work processes: Investigating the role of empowerment and perceived organisational support. *Journal of Occupational Health Psychology*, 14(2), 122-136. doi:10.1037/a0014114
- Byrne, B. M. (2010). *Structural equation modelling with AMOS: Basic concepts, applications, and programming* (2nd ed.). New York, NY: Routledge.
- Byrne, Z. S. (2005). Fairness reduces the negative effects of organizational politics on turnover intentions, citizenship behavior and job performance. *Journal of Business and Psychology*, 20(2), 175-200. doi:10.1007/s10869-005-8258-0
- Byrne, Z. S., Kacmar, C., Stoner, J., & Hochwarter, W. A. (2005). The relationship between perceptions of politics and depressed mood at work: Unique moderators across three levels. *Journal of Occupational Health Psychology*, 10(4), 330-343. doi:10.1037/1076-8998.10.4.330
- Carlson, M., & Mulaik, S. A. (1993). Trait ratings from descriptions of behavior as mediated by components of meaning. *Multivariate Behavioural Research*, 28(1), 111-159. doi:10.1207/s15327906mbr2801_7
- Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among US managers. *Journal of Applied Psychology*, 85(1), 65-74. doi:10.1037/0021-9010.85.1.65

- Chang, C. H., Rosen, C. C., & Levy, P. E. (2009). The relationship between perceptions of organizational politics and employee attitudes, strain, and behavior: A meta-analytic examination. *Academy of Management Journal*, 52(4), 779-801. doi:10.5465/AMJ.2009.43670894
- Chang, S. J., Van Witteloostuijn, A., & Eden, L. (2010). From the editors: Common method variance in international business research. *Journal of International Business Studies*, 41(2), 178-184. doi:10.1057/jibs.2009.88
- Chang, C. H., Rosen, C. C., Siemieniec, G. M., & Johnson, R. E. (2012). Perceptions of organizational politics and employee citizenship behaviours: Conscientiousness and self-monitoring as moderators. *Journal of Business and Psychology*, 27(4), 395-406. doi:10.1007/s10869-012-9257-6
- Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organisations: A meta-analysis. *Organisational Behavior and Human Decision Processes*, 86(2), 278-321. doi:10.1006/obhd.2001.2958
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioural sciences*. Mahwah, NJ: Erlbaum.
- Cole, D. A., & Maxwell, S. E. (2003). Testing mediational models with longitudinal data: Questions and tips in the use of structural equation modelling. *Journal of Abnormal Psychology*, 112(4), 558. doi:10.1037/0021-843X.112.4.558
- Cole, M. S., Walter, F., Bedeian, A. G., & O'Boyle, E. H. (2012). Job burnout and employee engagement: A meta-analytic examination of construct proliferation. *Journal of Management*, 38(5), 1550-1581. doi:10.1177/0149206311415252

- Colquitt, J. A. (2001). On the dimensionality of organisational justice: A construct validation of a measure. *Journal of Applied Psychology, 86*(3), 386-400. doi:10.1037//0021-9010.86.3.386
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organisational justice research. *Journal of Applied Psychology, 86*(3), 425-445. doi:10.1037//0021-9010.86.3.425
- Colquitt, J. A., Greenberg, J., & Zapata-Phelan, C. P. (2005). What is organizational justice? A historical overview. In J. Greenberg & J. A. Colquitt (Eds.), *Handbook of organizational justice* (pp. 3-58). Mahwah, NJ: Lawrence Erlbaum Associates.
- Colquitt, J. A., LePine, J. A., Piccolo, R. F., Zapata, C. P., & Rich, B. L. (2012). Explaining the justice – performance relationship: Trust as exchange deepener or trust as uncertainty reducer. *Journal of Applied Psychology, 97*(1), 1-15. doi:10.1037/a0025208
- Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology, 92*(4), 909-927. doi:10.1037/00219010.92.4.909
- Colquitt, J. A., Scott, B. A., Rodell, J. B., Long, D. M., Zapata, C. P., Conlon, D. E., & Wesson, M. J. (2013). Justice at the millennium, a decade later: A meta-analytic test of social exchange and affect-based perspectives. *Journal of Applied Psychology, 98*(2), 199-236. doi:10.1037/a0031757
- Colquitt, J. A., Long, D. M., Rodell, J. B., & Halvorsen-Ganepola, M. D. (2015). Adding the “in” to justice: A qualitative and quantitative investigation of the

- differential effects of justice rule adherence and violation. *Journal of Applied Psychology*, 100(2), 278-297. doi.org/10.1037/a0038131
- Colquitt, J. A., & Rodell, J. B. (2011). Justice, trust, and trustworthiness: A longitudinal analysis integrating three theoretical perspectives. *Academy of Management Journal*, 54(6), 1183-1206. doi:10.5465/amj.2007.0572
- Colquitt, J. A., & Rodell, J. B. (2015). Measuring justice and fairness. In R. Cropanzano & M. Ambrose (Eds.), *The Oxford handbook of justice in the workplace* (pp. 187-202). Oxford, UK: Oxford University Press.
- Colquitt, J. A., & Zipay, K. P. (2015). Justice, Fairness, and Employee Reactions. *Annual Review of Organizational Psychology and Organizational Behavior*, 2(1), 75-99. doi:10.1146/annurev-orgpsych-032414-111457
- Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel Psychology*, 59(3), 501-528. doi:org/10.1111/j.1744-6570.2006.00045.x
- Cooper, D. & Schindler, P. S. (2006). *Business research methods* (9th ed.). New York, NY: McGraw-Hill, Irwin.
- Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95(5), 834-848. doi:10.1037/a0019364
- Crawford, E., Rich, B., Buckman, B., & Bergeron, J. (2014). The antecedents and drivers of employee engagement. In C. Truss, R. Delbridge, K. Alfes, A.

- Shantz, & E. Soane (Eds.), *Employee engagement in theory and practice* (pp. 57-81). Abingdon: Routledge.
- Cronbach, L. J., & Furby, L. (1970). How we should measure "change": Or should we? *Psychological Bulletin*, 74(1), 68-80. doi:10.1037/h0029382
- Cropanzano, R., Howes, J. C., Grandey, A. A., & Toth, P. (1997). The relationship of organizational politics and support to work behaviours, attitudes, and stress. *Journal of Organizational Behavior*, 18(2), 159-180.
doi:10.1002/(SICI)1099-1379(199703)18:2<159::AID-JOB795>3.0.CO;2-D
- Cropanzano, R., Byrne, Z. S., Bobocel, D. R., & Rupp, D. E. (2001). Moral virtues, fairness heuristics, social entities, and other denizens of organizational justice. *Journal of Vocational Behavior*, 58(2), 164-209.
doi:10.1006/jvbe.2001.1791
- Cropanzano, R., Prehar, C. A., & Chen, P. Y. (2002). Using social exchange theory to distinguish procedural from interactional justice. *Group & Organization Management*, 27(3), 324-351. doi:10.1177/1059601102027003002
- Cropanzano, R., Goldman, B., & Folger, R. (2003). Deontic justice: The role of moral principles in workplace fairness. *Journal of Organizational Behavior*, 24(8), 1019-1024. doi:10.1002/job.228
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874-900.
doi:10.1177/0149206305279602
- Cropanzano, R., Bowen, D. E., & Gilliland, S. W. (2007). The management of organisational justice. *The Academy of Management Perspectives*, 21(4), 34-48.

- Cropanzano, R., & Stein, J. H. (2009). Organizational justice and behavioural ethics: Promises and prospects. *Business Ethics Quarterly*, *19*(2), 193-233.
doi:10.5840/beq200919211
- Cropanzano, R., & Wright, T. A. (2011). The impact of organizational justice on occupational health. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (pp. 205-219). Washington, DC: American Psychological Association.
- Cropanzano, R. S., Massaro, S., & Becker, W. J. (2017). Deontic justice and organizational neuroscience. *Journal of Business Ethics*, *144*(4), 733-754.
doi:10.1007/s10551-016-3056-3
- Cropanzano, R., Fortin, M., & Kirk, J. (2015). How do we know when we are treated fairly? Justice rules and fairness judgments. In J. R. B. Halbesleben, A. Wheeler, & M. R. Buckley (Eds.), *Research in personnel and human resources management* (Vol. 33, pp. 279–350). Amsterdam: Elsevier.
- Cropanzano, R., Anthony, E., Daniels, S., & Hall, A. (2017). Social exchange theory: A critical review with theoretical remedies. *Academy of Management Annals*, *11*(1), 1-38. doi:10.5465/annals.2015.0099
- Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods*, *1*(1), 16-29.
- De Carlo, L. T. (1997). On the meaning and use of kurtosis. *Psychological Methods*, *2*(3), 292-307. doi:10.1037/1082-989X.2.3.292
- De Clercq, D., & Belausteguigoitia, I. (2017). Mitigating the negative effect of perceived organizational politics on organizational citizenship behavior:

- Moderating roles of contextual and personal resources. *Journal of Management & Organization*, 23(5), 689–708. doi:10.1017/jmo.2017.7
- Deutsch, M. (1975). Equity, equality, and need: What determines which value will be used as the basis of distributive justice? *Journal of Social Issues*, 31(3), 137-149. doi:10.1111/j.1540-4560.1975.tb01000.x
- Di Patti, E. B., & Hardy, D. C. (2005). Financial sector liberalization, bank privatization, and efficiency: Evidence from Pakistan. *Journal of Banking & Finance*, 29(8), 2381-2406.
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 87(4), 611-628. doi:10.1037//0021-9010.87.4.611
- Donia, M. B., Johns, G., & Raja, U. (2016). Good soldier or good actor? Supervisor accuracy in distinguishing between selfless and self-serving OCB motives. *Journal of Business and Psychology*, 31(1), 1-10. doi:10.1007/s10869015-9397-6
- Drory, A., & Romm, T. (1988). Politics in organization and its perception within the organization. *Organization Studies*, 9(2), 165-179. doi:10.1177/017084068800900202
- Edwards, P., & Wright, M. (2001). High-involvement work systems and performance outcomes: The strength of variable, contingent and context bound relationships. *International Journal of Human Resource Management*, 12(4), 568-585. doi:10.1080/09586190110037281
- Edwards, J. R., & Cable, D. M. (2009). The value of value congruence. *Journal of Applied Psychology*, 94(3), 654-677. doi:10.1037/a0014891

- Fassina, N. E., Jones, D. A., & Uggerslev, K. L. (2008). Meta-analytic tests of relationships between organizational justice and citizenship behavior: Testing agent-system and shared-variance models. *Journal of Organizational Behavior, 29*(1), 805–828. doi:10.1002/job.494
- Ferris, G. R., Russ, G. S., & Fandt, P. M. (1989). Politics in organizations. In R. A. Giacalone & P. Rosenfeld (Eds.), *Impression management in the organization* (pp. 143–170). Hillsdale, NJ: Erlbaum.
- Ferris, G. R., & Kacmar, K. M. (1992). Perceptions of organizational politics. *Journal of Management, 18*(1), 93-116. doi:10.1177/014920639201800107
- Ferris, G. R., Frink, D. D., Galang, M. C., Zhou, J., Kacmar, K. M., & Howard, J. L. (1996). Perceptions of organizational politics: Prediction, stress-related implications, and outcomes. *Human Relations, 49*(2), 233-266. doi:10.1177/001872679604900206
- Ferris, G. R., Perrewé, P. L., Daniels, S. R., Lawong, D., & Holmes, J. J. (2017). Social influence and politics in organizational research: What we know and what we need to know. *Journal of Leadership & Organizational Studies, 24*(1), 5-19. doi:10.1177/1548051816656003
- Ferrer, E., & McArdle, J. (2003). Alternative structural models for multivariate longitudinal data analysis. *Structural Equation Modeling, 10*(4), 493-524. doi:10.1207/S15328007SEM1004_1
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). London. SAGE.
- Fields, D., Pang, M., & Chiu, C. (2000). Distributive and procedural justice as predictors of employee outcomes in Hong Kong. *Journal of Organizational Behavior, 21*(1), 547-562.

- Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, *32*(1), 115-130. doi:10.2307/256422
- Folger, R., & Cropanzano, R. (2001). Fairness theory: Justice as accountability. In J. Greenberg & R. Cropanzano (Eds.), *Advances in organizational justice* (pp. 1–55). Stanford, CA: Stanford University Press.
- Folger, R., & Glerum, D. R. (2015). Justice and deonance: “You ought to be fair”. In R. Cropanzano & M. L. Ambrose (Eds.), *The Oxford handbook of justice in the workplace* (pp. 331–350). Oxford, UK: Oxford University Press.
- Frieder, R. E., Ma, S., & Hochwarter, W. A. (2015). Creating one’s reality: The interaction of politics perceptions and enactment behavior. *The Journal of Social Psychology*, *156*(1), 74-97. doi:10.1080/00224545.2015.1066295
- Gandz, J., & Murray, V. V. (1980). The experience of workplace politics. *Academy of Management Journal*, *23*(2), 237-251. doi:10.2307/255429
- Gerbing, D. W., & Anderson, J. C. (1984). On the meaning of within-factor correlated measurement errors. *Journal of Consumer Research*, *11*(1), 572-580. doi:10.1086/208993
- Ghosh, P., Rai, A., & Sinha, A. (2014). Organizational justice and employee engagement: Exploring the linkage in public sector banks in India. *Personnel Review*, *43*(4), 628-652. doi:10.1108/PR-08-2013-0148
- Goldman, B., & Cropanzano, R. (2015). “Justice” and “fairness” are not the same thing. *Journal of Organizational Behavior*, *36*(2), 313-318. doi:10.1002/job.1956
- Gould-Williams, J. (2003). The importance of HR practices and workplace trust in achieving superior performance: A study of public-sector organizations.

International Journal of Human Resource Management, 14(1), 28-54.

doi:10.1080/09585190210158501

Greenberg, J. (2006). Losing sleep over organisational injustice: Attenuating insomniac reactions to underpayment inequity with supervisory training in interactional justice. *Journal of Applied Psychology*, 91(1), 58-69.

doi:10.1037/0021-9010.91.1.58

Greenberg, J. (2009). Everybody talks about organizational justice, but nobody does anything about it. *Industrial and Organizational Psychology*, 2(2), 181-195.

doi:10.1111/j.1754-9434.2009.01131.x

Gruman, J. A., & Saks, A. M. (2011). Performance management and employee engagement. *Human Resource Management Review*, 21(2), 123-136.

doi:10.1016/j.hrmr.2010.09.004

Guest, D. E. (2017). Human resource management and employee well-being: Towards a new analytic framework. *Human Resource Management Journal*,

27(1), 22–38. doi:10.1111/1748-8583.12139

Guthrie, J. P. (2001). High-involvement work practices, turnover, and productivity: Evidence from New Zealand. *Academy of Management Journal*, 44(1), 180-

190. doi:10.2307/3069345

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16(2),

250-279. doi:10.1016/0030-5073(76)90016-7

Hall, A. T., Hochwarter, W. A., Ferris, G. R., & Bowen, M. G. (2004). The dark side of politics in organizations. In R. W. Griffin & A. M. O’Leary-Kelly (Eds.),

The dark side of organizational behavior, (pp. 237–261). San Francisco:

Jossey-Bass.

- Halbesleben, J. R., Neveu, J. P., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the “COR”: Understanding the role of resources in conservation of resources theory. *Journal of Management*, *40*(5), 1334-1364.
doi:10.1177/0149206314527130
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2016). *Multivariate data analysis* (7th ed.). Pearson: India.
- Hameed, I., Roques, O., & Arain, G. A. (2013). Nonlinear moderating effect of tenure on organizational identification (OID) and the subsequent role of OID in fostering readiness for change. *Group & Organization Management*, *38*(1), 101-127. doi:10.1177/1059601112472727
- Hamaker, E. L., Kuiper, R. M., & Grasman, R. P. (2015). A critique of the cross lagged panel model. *Psychological Methods*, *20*(1), 102-116.
doi.org/10.1037/a0038889
- Harris, K. J., Andrews, M. C., & Kacmar, K. M. (2007). The moderating effects of justice on the relationship between organizational politics and workplace attitudes. *Journal of Business and Psychology*, *22*(2), 135-144.
doi:10.1007/s10869-007-9054-9
- Harris, R. B., Harris, K. J., & Harvey, P. (2007). A test of competing models of the relationships among perceptions of organizational politics, perceived organizational support, and individual outcomes. *The Journal of Social Psychology*, *147*(6), 631-656. doi:10.3200/SOCP.147.6.631-656
- Harris, K. J., Harris, R. B., & Wheeler, A. R. (2009). Relationships between politics, supervisor communication, and job outcomes. *Journal of Applied Social Psychology*, *39*(11), 2669-2688. doi:10.1111/j.1559-1816.2009.00543.x

- Haynie, J. J., Mossholder, K. W., & Harris, S. G. (2016). Justice and job engagement: The role of senior management trust. *Journal of Organizational Behavior, 37*(6), 889-910. doi:10.1002/job.2082
- He, H., Zhu, W., & Zheng, X. (2014). Procedural justice and employee engagement: Roles of organizational identification and moral identity centrality. *Journal of Business Ethics, 122*(4), 681-695. doi:10.1007/s10551-013-1774-3
- Highhouse, S., & Gillepsie, J. Z. (2009). Do samples really matter that much? In C.E. Lance, & R.J. Vandenberg (Eds.), *Statistical and methodological myths and urban legends: Doctrine, verity and fable in organizational and social sciences* (pp. 247–266). New York, NY: Routledge.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44*(3), 513-524.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology, 50*(3), 337-421. doi:10.1111/1464-0597.00062
- Hochwarter, W. A., Ferris, G. R., Laird, M. D., Treadway, D. C., & Gallagher, V. C. (2010). Nonlinear politics perceptions – work outcomes relationships: A three study, five sample investigation. *Journal of Management, 36*(3), 740-763. doi:10.1177/0149206308324065
- Hochwarter, W. A. (2012). The positive side of organizational politics. In G. R. Ferris & D. C. Treadway (Eds.), *Politics in organizations: Theory and research considerations* (pp. 27-66). New York, NY: Routledge.

- Hochwarter, W. A., Ellen, B. P. III., & Ferris, G. R. (2014). Examining the interactive effects of accountability, politics, and voice. *Career Development International*, 19(4), 358-380. doi:10.1108/CDI-01-2014-0012
- Hu, L. T., & Bentler, P. M. (1998). Fit indices in covariance structure modelling: Sensitivity to under parameterized model misspecification. *Psychological Methods*, 3(4), 424-453. doi:10.1037/1082-989X.3.4.424
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modelling*, 6(1), 1-55. doi:10.1080/10705519909540118
- Huang, I. C., Chuang, C. H. J., & Lin, H. C. (2003). The role of burnout in the relationship between perceptions of organizational politics and turnover intentions. *Public Personnel Management*, 32(4), 519-531. doi:10.1177/009102600303200404
- Inoue, A., Kawakami, N., Ishizaki, M., Shimazu, A., Tsuchiya, M., Tabata, M., ... & Kuroda, M. (2010). Organizational justice, psychological distress, and work engagement in Japanese workers. *International Archives of Occupational and Environmental Health*, 83(1), 29-38. doi:10.1007/s00420-009-0485-7
- Irving, P. G., & Meyer, J. P. (1999). On using residual difference scores in the measurement of congruence: The case of met expectations research. *Personnel Psychology*, 52(1), 85-95. doi:10.1111/j.1744-6570.1999.tb01814.x
- Iverson, R. D., & Maguire, C. (2000). The relationship between job and life satisfaction: Evidence from a remote mining community. *Human Relations*, 53(6), 807-839. doi:10.1177/0018726700536003

- Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6), 1264-1294. doi:10.5465/amj.2011.0088
- Kacmar, K. M., & Baron, R. A. (1999). Organizational politics: The state of the field, links to related processes, and an agenda for future research. In G. R. Ferris (Ed.), *Research in personnel and human resource management*, (Vol. 17, pp. 1-39). Stamford, CT: JAI Press.
- Kacmar, K. M., & Carlson, D. S. (1997). Further validation of the perceptions of politics scale (POPS): A multiple sample investigation. *Journal of Management*, 23(5), 627-658. doi:10.1016/S0149-2063(97)90019-2
- Kacmar, K. M., & Ferris, G. R. (1991). Perceptions of organizational politics scale (POPS): Development and construct validation. *Educational and Psychological Measurement*, 51(1), 193-205.
doi:10.1177/0013164491511019
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.
doi:10.2307/256287
- Kane-Frieder, R. E., Hochwarter, W. A., Hampton, H. L., & Ferris, G. R. (2014). Supervisor political support as a buffer to subordinates' reactions to politics perceptions: A three sample investigation. *Career Development International* 19(1), 27-48. doi:10.1108/CDI-09-2013-0113
- Karatepe, O. M. (2011). Procedural justice, work engagement, and job outcomes: Evidence from Nigeria. *Journal of Hospitality Marketing & Management*, 20(8), 855-878. doi:10.1080/19368623.2011.577688

- Karatepe, O. M. (2013a). High-performance work practices and hotel employee performance: The mediation of work engagement. *International Journal of Hospitality Management*, 32(1), 132-140. doi:10.1016/j.ijhm.2012.05.003
- Karatepe, O. M. (2013b). Perceptions of organizational politics and hotel employee outcomes: The mediating role of work engagement. *International Journal of Contemporary Hospitality Management*, 25(1), 82-104. doi:10.1108/09596111311290237
- Kaufman, B. E. (2012). Strategic human resource management research in the United States: A failing grade after 30 years? *Academy of Management Perspectives*, 26(2), 12-36. doi:10.5465/amp.2012.0037
- Kenny, D. A., Kaniskan, B., & McCoach, D. B. (2015). The performance of RMSEA in models with small degrees of freedom. *Sociological Methods & Research*, 44(3), 486-507. doi:10.1177/0049124114543236
- Kenny, D. A., & McCoach, D. B. (2003). Effect of the number of variables on measures of fit in structural equation modelling. *Structural Equation Modelling*, 10(3), 333-351. doi:10.1207/S15328007SEM1003_1
- Kernan, M. C., & Hanges, P. J. (2002). Survivor reactions to reorganization: Antecedents and consequences of procedural, interpersonal, and informational justice. *Journal of Applied Psychology*, 87(5), 916-928. doi:10.1037//0021-9010.87.5.916
- Khan, A. K., Quratulain, S., & Crawshaw, J. R. (2013). The mediating role of discrete emotions in the relationship between injustice and counter productive work behaviours: A study in Pakistan. *Journal of Business and Psychology*, 28(1), 49-61. doi:10.1007/s10869-012-9269-2

- Khilji, S. E. (2004). Whither tradition? Evidence of generational differences in HR satisfaction from Pakistan. *International Journal of Cross Cultural Management*, 4(2), 141-156. doi:10.1177/1470595804044746
- Khilji, S. E., & Wang, X. (2006). 'Intended' and 'implemented' HRM: The missing linchpin in strategic human resource management research. *The International Journal of Human Resource Management*, 17(7), 1171-1189. doi:10.1080/09585190600756384
- Kim, T. Y., & Leung, K. (2007). Forming and reacting to overall fairness: A cross cultural comparison. *Organizational Behavior and Human Decision Processes*, 104(1), 83-95. doi:10.1016/j.obhdp.2007.01.004
- Kinnie, N., Hutchinson, S., & Purcell, J. (2000). 'Fun and surveillance': The paradox of high commitment management in call centres. *International Journal of Human Resource Management*, 11(5), 967-985. doi:10.1080/095851900422375
- Kizilos, M. A., Cummings, C., & Cummings, T. G. (2013). How high-involvement work processes increase organisation performance: The role of organisational citizenship behaviour. *The Journal of Applied Behavioural Science*, 49(4), 413-436. doi:10.1177/0021886313479998
- Kline, R. B. (2011). *Principles and practice of structural equation modelling* (3rd ed.). New York, NY: The Guilford Press.
- Konovsky, M. A., & Pugh, S. D. (1994). Citizenship behavior and social exchange. *Academy of Management Journal*, 37(3), 656-669. doi:10.5465/256704
- Korsgaard, M. A., & Roberson, L. (1995). Procedural justice in performance evaluation: The role of instrumental and non-instrumental voice in

performance appraisal discussions. *Journal of Management*, 21(4), 657-669.

doi:10.1016/0149-2063(95)90004-7

Korsgaard, M. A., Brodt, S. E., & Whitener, E. M. (2002). Trust in the face of conflict: The role of managerial trustworthy behavior and organizational context. *Journal of Applied Psychology*, 87(2), 312-319. doi:10.1037//0021-9010.87.2.312

Kuvaas, B. (2008). An exploration of how the employee-organization relationship affects the linkage between perception of developmental human resource practices and employee outcomes. *Journal of Management Studies*, 45(1), 1-25. doi:10.1111/j.1467-6486.2007.00710.x

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33(1), 159-174. doi:10.2307/2529310

Landells, E. M., & Albrecht, S. L. (2017). The positives and negatives of organizational politics: A qualitative study. *Journal of Business and Psychology*, 32(1), 41-58. doi:10.1007/s10869-015-9434-5

Lavelle, J. J., Rupp, D. E., & Brockner, J. (2007). Taking a multifoci approach to the study of justice, social exchange, and citizenship behavior: The target similarity model. *Journal of Management*, 33(6), 841-866. doi:10.1177/0149206307307635

Lawler, E. E. (1986). *High-involvement management: Participative strategies for improving organizational performance*. San Francisco, CA: Jossey-Bass.

Lawler, E. E. (1988). Choosing an involvement strategy. *The Academy of Management Executive*, 2(3), 197-204. doi:10.5465/AME.1988.4277254

- Lawler, E. E. (1994). Total quality management and employee involvement: Are they compatible? *The Academy of Management Executive*, 8(1), 68-76.
doi:10.5465/AME.1994.9411302396
- Lawler, E. E. (2003). *Treat people right! How organizations and individuals can propel each other into a virtuous spiral of success*. San Francisco, CA: Jossey-Bass.
- Lawler, E. E., & Mohrman, S. A. (1987). Unions and the new management. *The Academy of Management Executive*, 1(4), 293-300.
doi:10.5465/AME.1987.4275643
- Lawler, E. E., Mohrman, S. A., & Ledford, G. E. (1992). *Employee involvement and total quality management*. San Francisco, CA: Jossey-Bass.
- Lawler, E. E., Mohrman, S. A., & Benson, G. (2001). *Organizing for high performance: Employee involvement, TQM, reengineering, and knowledge management in the Fortune 1000*. San Francisco, CA: Jossey-Bass.
- Lawson, K. J., Noblet, A. J., & Rodwell, J. J. (2009). Promoting employee wellbeing: The relevance of work characteristics and organisational justice. *Health Promotion International*, 24(3), 223-233. doi:10.1093/heapro/dap025
- Leana, C. R., Ahlbrandt, R. S., & Murrell, A. J. (1992). The effects of employee involvement programs on unionized workers' attitudes, perceptions, and preferences in decision making. *Academy of Management Journal*, 35(4), 861-873. doi:10.2307/256319
- LePine, J. A., Podsakoff, N. P., & LePine, M. A. (2005). A meta-analytic test of the challenge stressor–hindrance stressor framework: An explanation for inconsistent relationships among stressors and performance. *Academy of Management Journal*, 48(5), 764-775. doi:10.5465/AMJ.2005.18803921

- Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the study of justice in social relationships. In K. Gergen, M. Greenberg, & R. Willis (Eds.), *Social exchange: Advances in experimental and social psychology* (pp. 27-55). New York, NY: Plenum Press.
- Lewis, J. D., & Weigert, A. (1985). Trust as a social reality. *Social Forces*, 63(4), 967-985. doi:10.1093/sf/63.4.967
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York, NY: Plenum.
- Lind, E. A. (2001). Fairness heuristic theory: Justice judgments as pivotal cognitions in organizational relations. In J. Greenberg & R. Cropanzano (Eds.), *Advances in organizational justice* (pp. 56–88). Stanford, CA: Stanford University Press.
- Lind, E. A., & Van den Bos, K. (2002). When fairness works: Toward a general theory of uncertainty management. In B. M. Staw & R. M. Kramer (Eds.), *Research in organizational behavior* (Vol. 24, pp. 181–222). Boston, MA: JAI.
- Linn, R. L., & Slinde, J. A. (1977). The determination of the significance of change between pre-and post-testing periods. *Review of Educational Research*, 47(1), 121-150.
- Little, R. J. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association*, 83(404), 1198-1202.
- Lord, F. M. (1967). A paradox in the interpretation of group comparisons. *Psychological Bulletin*, 68(5), 304-305. doi:10.1037/h0025105

- Lyu, X. (2016). Effect of organizational justice on work engagement with psychological safety as a mediator: Evidence from China. *Social Behavior and Personality: An International Journal*, 44(8), 1359-1370. doi:10.2224/sbp.2016.44.8.1359
- MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equation modelling in psychological research. *Annual Review of Psychology*, 51(1), 201-226. doi:10.1146/annurev.psych.51.1.201
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modelling. *Psychological Methods*, 1(2), 130-149. doi:10.1037/1082-989X.1.2.130
- Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1(1), 3-30. doi:10.1111/j.1754-9434.2007.0002.x
- Macey, W. H., Schneider, B., Barbera, K. M., & Young, S. A. (2009). *Employee engagement: Tools for analysis, practices, and competitive advantage*. Chichester: UK, John Wiley & Sons
- Mackie, K. S., Holahan, C. K., & Gottlieb, N. H. (2001). Employee involvement management practices, work stress, and depression in employees of a human services residential care facility. *Human Relations*, 54(8), 1065-1092. doi:10.1177/0018726701548004
- MacKinnon, D. P., Kisbu-Sakarya, Y., & Gottschall, C. A. (2013). Developments in mediation analysis. In T. D. Little (Ed.), *The Oxford handbook of quantitative methods* (Vol. 2, pp. 238-260). New York, NY: Oxford University Press.

- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioural Research*, 39(1), 99-128.
doi:10.1207/s15327906mbr3901_4
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7(1), 83-104. doi:10.1037//1082-989X.7.1.83
- Macky, K., & Boxall, P. (2008). High-involvement work processes, work intensification and employee well-being: A study of New Zealand worker experiences. *Asia Pacific Journal of Human Resources*, 46(1), 38-55.
doi:10.1177/1038411107086542
- Manan, A. (2015, March, 18). Sixth population census to be conducted in March 2016: CCI. *The Express Tribune*. Retrieved on October 1, 2016 from <http://tribune.com.pk/story/855205/sixth-population-census-to-be-conducted-in-march-2016-cci/>
- Marchington, M. (2015). Analysing the forces shaping employee involvement and participation (EIP) at organisation level in liberal market economies (LMEs). *Human Resource Management Journal*, 25(1), 1-18. doi:10.1111/1748-8583.12065
- Marsh, H. W., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First- and higher order factor models and their invariance across groups. *Psychological Bulletin*, 97(3), 562-582.
doi:10.1037/0033-2909.97.3.562

- Marsh, H. W., & Balla, J. (1994). Goodness of fit in confirmatory factor analysis: The effects of sample size and model parsimony. *Quality and Quantity*, 28(2), 185-217.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397-422. doi:10.1146/annurev.psych.52.1.397
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93(3), 498-512. doi:10.1037/0021-9010.93.3.498
- Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal*, 43(4), 738-748. doi:10.2307/1556364
- Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation. *Psychological Methods*, 12(1), 23-44. doi:10.1037/1082-989X.12.1.23
- Maxwell, S. E., Cole, D. A., & Mitchell, M. A. (2011). Bias in cross-sectional analyses of longitudinal mediation: Partial and complete mediation under an autoregressive model. *Multivariate Behavioral Research*, 46(5), 816-841. doi:10.1080/00273171.2011.606716
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of trust in employer. *Academy of Management Review*, 20(3), 709-734. doi:10.5465/AMR.1995.9508080335
- Mayer, R. C., & Davis, J. H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of Applied Psychology*, 84(1), 123-136. doi:10.1037/0021-9010.84.1.123

- Mayer, R. C., & Gavin, M. B. (2005). Trust in management and performance: Who minds the shop while the employees watch the boss? *Academy of Management Journal*, 48(5), 874-888. doi:10.5465/AMJ.2005.18803928
- McAllister, D. J. (1995). Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38(1), 24-59. doi:10.2307/256727
- McArdle, J. J. (2009). Latent variable modeling of differences and changes with longitudinal data. *Annual Review of Psychology*, 60(1), 577-605. doi:10.1146/annurev.psych.60.110707.163612
- McEvily, B., & Tortoriello, M. (2011). Measuring trust in organisational research: Review and recommendations. *Journal of Trust Research*, 1(1), 23-63. doi:10.1080/21515581.2011.552424
- Meyer, J. P., & Smith, C. A. (2000). HRM practices and organizational commitment: Test of a mediation model. *Canadian Journal of Administrative Sciences*, 17(4), 319-331. doi:10.1111/j.1936-4490.2000.tb00231.x
- Miller, B. K., Rutherford, M. A., & Kolodinsky, R. W. (2008). Perceptions of organizational politics: A meta-analysis of outcomes. *Journal of Business and Psychology*, 22(3), 209-222. doi:10.1007/s10869-008-9061-5
- Miller, B. K., & Nicols, K. M. (2008). Politics and justice: A mediated moderation model. *Journal of Managerial Issues*, 20(2), 214-237.
- Mintzberg, H. (1983). *Power in and around organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Mintzberg, H. (1985). The organization as political arena. *Journal of Management Studies*, 22(2), 133-154. doi:10.1111/j.1467-6486.1985.tb00069.x

- Mishra, A. K., & Mishra, K. E. (2012). Positive organizational scholarship and trust in leaders. In K. S. Cameron & G. M. Spreitzer (Eds.), *The Oxford hand book of positive organizational scholarship* (pp. 449-461). New York, NY: Oxford University Press.
- Mitchell, T. R., & James, L. R. (2001). Building better theory: Time and the specification of when things happen. *Academy of Management Review*, 26(4), 530-547. doi:10.5465/AMR.2001.5393889
- Mohr, R. D., & Zoghi, C. (2008). High-involvement work design and job satisfaction. *Industrial & Labor Relations Review*, 61(3), 275-296. doi:10.1177/001979390806100301
- Moliner, C., Martinez-Tur, V., Ramos, J., Peiró, J. M., & Cropanzano, R. (2008). Organizational justice and extra role customer service: The mediating role of well-being at work. *European Journal of Work and Organizational Psychology*, 17(3), 327-348. doi:10.1080/13594320701743616
- Moliner, C., Martínez-Tur, V., Peiró, J. M., Ramos, J., & Cropanzano, R. (2013). Perceived reciprocity and well-being at work in non-professional employees: Fairness or self-interest? *Stress and Health*, 29(1), 31-39. doi:10.1002/smi.2421
- Moorman, R. H. (1991). Relationship between organisational justice and organisational citizenship behaviours: Do fairness perceptions influence employee citizenship behaviour? *Journal of Applied Psychology*, 76(6), 845-855. doi:10.1037/0021-9010.76.6.845
- Mossholder, K. W., Bennett, N., Kemery, E. R., & Wesolowski, M. A. (1998). Relationships between bases of power and work reactions: The mediational

role of procedural justice. *Journal of Management*, 24(4), 533-552.

doi:10.1016/S0149-2063(99)80072-5

Muhammad, A. H. (2007). Antecedents of organizational politics perceptions in Kuwait business organizations. *Competitiveness Review: An International Business Journal*, 17(4), 234-247. doi:10.1108/10595420710844325

Mulaik, S. A., James, L. R., Van Alstine, J., Bennett, N., Lind, S., & Stilwell, C. D. (1989). Evaluation of goodness-of-fit indices for structural equation models. *Psychological Bulletin*, 105(3), 430-445. doi:10.1037/0033-2909.105.3.430

Murtaza, G., Abbas, M., Raja, U., Roques, O., Khalid, A., & Mushtaq, R. (2014). Impact of Islamic work ethics on organizational citizenship behaviours and knowledge-sharing behaviours. *Journal of Business Ethics*, 133(2), 325-333. doi:10.1007/s10551014-2396-0

Nadiri, H., & Tanova, C. (2010). An investigation of the role of justice in turn over intentions, job satisfaction, and organizational citizenship behavior in hospitality industry. *International Journal of Hospitality Management*, 29(1), 33-41. doi:10.1016/j.ijhm.2009.05.001

Neuman, W. L. (2014). *Social research methods: Qualitative and quantitative approaches* (7th ed.). Essex, UK: Pearson Education, Inc.

Newman, D. A., & Harrison, D. A. (2008). Been there, bottled that: Are state and behavioural work engagement new and useful construct “wines”? *Industrial and Organizational Psychology*, 1(1), 31-35.

Nye, L. G., & Witt, L. A. (1993). Dimensionality and construct validity of the perceptions of organizational politics scale (POPS). *Educational and*

Psychological Measurement, 53(3), 821-829.

doi:10.1177/0013164493053003026

O'Connor, W. E., & Morrison, T. G. (2001). A comparison of situational and dispositional predictors of perceptions of organizational politics. *The Journal of Psychology*, 135(3), 301-312. doi:10.1080/00223980109603700

Oppenauer, V., & Van De Voorde, K. (2018). Exploring the relationships between high involvement work system practices, work demands and emotional exhaustion: A multi-level study. *The International Journal of Human Resource Management*, 29(2), 311-337.

O'Toole, J., & Lawler, E. E. (2006). *The new American workplace*. New York, NY: Palgrave MacMillan.

Pare, G., & Tremblay, M. (2007). The influence of high-involvement human resources practices, procedural justice, organisational commitment, and citizenship behaviours on information technology professionals' turnover intentions. *Group & Organisation Management*, 32(3), 326-357.
doi:10.1177/1059601106286875

Park, Y., Song, J. H., & Lim, D. H. (2016). Organizational justice and work engagement: The mediating effect of self-leadership. *Leadership & Organization Development Journal*, 37(6), 711-729. doi:10.1108/LODJ-09-2014-0192

Peccei, R., Van de Voorde, K., & Van Veldhoven, M. (2013). HRM, well-being and performance. In J. Paauwe, D. Guest, & P. Wright (Eds.), *HRM & performance: Achievements & challenges* (pp. 15–46). Chichester: Wiley

Petscher, Y., & Schatschneider, C. (2011). A simulation study on the performance of the simple difference and covariance-adjusted scores in randomized

- experimental designs. *Journal of Educational Measurement*, 48(1), 31-43.
doi:10.1111/j.17453984.2010.00129.x.
- Pfeffer, J. (1998). Seven practices of successful organizations. *California Management Review*, 40(2), 96-124.
- Pirson, M., & Malhotra, D. (2011). Foundations of organizational trust: What matters to different stakeholders? *Organization Science*, 22(4), 1087-1104.
doi:10.1287/orsc.1100.0581
- Pitariu, A. H., & Ployhart, R. E. (2010). Explaining change: Theorizing and testing dynamic mediated longitudinal relationships. *Journal of Management*, 36(2), 405-429. doi:10.1177/0149206308331096
- Ployhart, R. E., & MacKenzie, W. I. (2015). Two waves of measurement do not a longitudinal study make. In C. E. Lance & R. J. Vandenberg (Eds.) *More statistical and methodological myths and urban legends* (pp. 85-99). New York, NY: Routledge.
- Ployhart, R. E., & Vandenberg, R. J. (2010). Longitudinal research: The theory, design, and analysis of change. *Journal of Management*, 36(1), 94-120.
doi:10.1177/0149206309352110
- Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, 92(2), 438. doi:10.1037/0021-9010.92.2.438
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63(1), 539-569. doi:10.1146/annurev-psych-120710-100452

- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903. doi:10.1037/00219010.88.5.879
- Poon, J. M. (2003). Situational antecedents and outcomes of organizational politics perceptions. *Journal of Managerial Psychology, 18*(2), 138-155. doi:10.1108/02683940310465036
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behaviour Research Methods, 40*(3), 879-891. doi:10.3758/BRM.40.3.879
- Prince, J. B., Katz, J., & Kabst, R. (2011). High-involvement information sharing practices: An international perspective. *The International Journal of Human Resource Management, 22*(12), 2485-2506. doi:10.1080/09585192.2011.588032
- Proudfoot, D., & Lind, E. A. (2015). Fairness heuristic theory, the uncertainty management model, and fairness at work. In R. Cropanzano & M. L. Ambrose (Eds.), *The Oxford handbook of justice in the workplace* (pp. 371-386). Oxford, UK: Oxford University Press.
- Purcell, J. (1999). Best practice and best fit: Chimera or cul-de-sac? *Human Resource Management Journal, 9*(3), 26-41. doi:10.1111/j.1748-8583.1999.tb00201.x
- Raja, U., & Johns, G. (2010). The joint effects of personality and job scope on in role performance, citizenship behaviours, and creativity. *Human Relations, 63*(7), 981-1005. doi:10.1177/0018726709349863

- Randall, M. L., Cropanzano, R., Bormann, C. A., & Birjulin, A. (1999). Organizational politics and organizational support as predictors of work attitudes, job performance, and organizational citizenship behavior. *Journal of Organizational Behavior*, 20(2), 159-174.
- Rawls, J. (1971). *A theory of justice*. Cambridge, MA: Harvard University Press.
- Richardson, H. A., & Vandenberg, R. J. (2005). Integrating managerial perceptions and transformational leadership into a work-unit level model of employee involvement. *Journal of Organizational Behavior*, 26(5), 561-589.
doi:10.1002/job.329
- Rich, B. L., LePine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617-635. doi:10.5465/AMJ.2010.51468988
- Riordan, C. M., Vandenberg, R. J., & Richardson, H. A. (2005). Employee involvement climate and organisational effectiveness. *Human Resource Management*, 44(4), 471-488. doi:10.1002/hrm.20085
- Robinson, S. L. (1996). Trust and breach of the psychological contract. *Administrative Science Quarterly*, 41(4), 574-599. doi:10.2307/2393868
- Robinson, S. L., & Rousseau, D. M. (1994). Violating the psychological contract: Not the exception but the norm. *Journal of Organizational Behavior*, 15(3), 245-259. doi:10.1002/job.4030150306
- Rodell, J. B., Colquitt, J. A., & Baer, M. D. (2017). Is adhering to justice rules enough? The role of charismatic qualities in perceptions of supervisors' overall fairness. *Organizational Behavior and Human Decision Processes*, 140(1), 14-28. doi:10.1016/j.obhdp.2017.03.001

- Rogosa, D. (1980). A critique of cross-lagged correlation. *Psychological Bulletin*, 88(2), 245-258. doi:10.1037/0033-2909.88.2.245
- Rogosa, D. (1995). Myths and methods: "Myths about longitudinal research" plus supplemental questions. In J. M. Gottman (Ed.). *The analysis of change* [EBL version]. Retrieved from <http://www.aut.eblib.com.au>
- Rogosa, D. R., & Willett, J. B. (1983). Demonstrating the reliability of the difference score in the measurement of change. *Journal of Educational Measurement*, 20(4), 335-343. doi:10.1111/j.1745-3984.1983.tb00211.x
- Rogosa, D. R., & Willett, J. B. (1985). Understanding correlates of change by modeling individual differences in growth. *Psychometrika*, 50(2), 203-228. doi:10.1007/BF02294247
- Rogosa, D., Brandt, D., & Zimowski, M. (1982). A growth curve approach to the measurement of change. *Psychological Bulletin*, 92(3), 726-748. doi:10.1037/0033-2909.92.3.726
- Rosen, C. C., Harris, K. J., & Kacmar, K. M. (2009). The emotional implications of organizational politics: A process model. *Human Relations*, 62(1), 27-57. doi:10.1177/0018726708099836
- Rosen, C. C., Chang, C. H., Johnson, R. E., & Levy, P. E. (2009). Perceptions of the organizational context and psychological contract breach: Assessing competing perspectives. *Organizational Behavior and Human Decision Processes*, 108(2), 202-217. doi:10.1016/j.obhdp.2008.07.003
- Rosen, C. C., Harris, K. J., & Kacmar, K. M. (2009). The emotional implications of organizational politics: A process model. *Human Relations*, 62(1), 27-57. doi:10.1177/0018726708099836

- Rosen, C. C., & Hochwarter, W. A. (2014). Looking back and falling further behind: The moderating role of rumination on the relationship between organizational politics and employee attitudes, well-being, and performance. *Organizational Behavior and Human Decision Processes*, *124*(2), 177-189.
doi:10.1016/j.obhdp.2014.03.003
- Rosen, C. C., Ferris, D. L., Brown, D. J., Chen, Y., & Yan, M. (2014). Perceptions of organizational politics: A need satisfaction paradigm. *Organization Science*, *25*(4), 1026-1055. doi:10.1287/orsc.2013.0857
- Rosen, C. C., & Levy, P. E. (2013). Stresses, swaps, and skill: An investigation of the psychological dynamics that relate work politics to employee performance. *Human Performance*, *26*(1), 44-65.
doi:10.1080/08959285.2012.736901
- Rosen, C. C., Levy, P. E., & Hall, R. J. (2006). Placing perceptions of politics in the context of the feedback environment, employee attitudes, and job performance. *Journal of Applied Psychology*, *91*(1), 211-220.
doi:10.1037/0021-9010.91.1.211
- Rosen, C. C., Ferris, D. L., Brown, D. J., Chen, Y., & Yan, M. (2014). Perceptions of organizational politics: A need satisfaction paradigm. *Organization Science*, *25*(4), 1026-1055. doi:10.1287/orsc.2013.0857
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, *23*(3), 393-404. doi:10.5465/AMR.1998.926617
- Rubel, M. R. B., Kee, D. M. H., Rimi, N. N., & Yusoff, Y. M. (2017). Adapting technology: Effect of high-involvement HRM and trust in employer.

Behaviour & Information Technology, 36(3), 281-293.

doi:10.1080/0144929X.2016.1222552

Rupp, D. E., & Cropanzano, R. (2002). The mediating effects of social exchange relationships in predicting workplace outcomes from multifoci organizational justice. *Organizational Behavior and Human Decision Processes*, 89(1), 925-946. doi:10.1016/S0749-5978(02)00036-5

Rupp, D. E., Shao, R., Jones, K. S., & Liao, H. (2014). The utility of a multifoci approach to the study of organizational justice: A meta-analytic investigation into the consideration of normative rules, moral accountability, bandwidth fidelity, and social exchange. *Organizational Behavior and Human Decision Processes*, 123(2), 159-185. doi:10.1016/j.obhdp.2013.10.011

Rupp, D. E., Shapiro, D. L., Folger, R., Skarlicki, D. P., & Shao, R. (2017). Acritical analysis of the conceptualization and measurement of organizational justice: Is it time for reassessment? *Academy of Management Annals*, 11(2), 919-959. doi:10.5465/annals.2014.0051

Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600-619.

doi:10.1108/02683940610690169

Saks, A. M. (2017). Translating employee engagement research into practice.

Organizational Dynamics, 46(2), 76-86. doi:10.1016/j.orgdyn.2017.04.003

Saks, A. M., & Gruman, J. A. (2014). What do we really know about employee engagement? *Human Resource Development Quarterly*, 25(2), 155-182.

doi:10.1002/hrdq.21187

- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71-92.
doi:10.1023/A:1015630930326
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66(4), 701-716.
doi:10.1177/0013164405282471
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293-315. doi:10.1002/job.248
- Schminke, M., Ambrose, M. L., & Cropanzano, R. S. (2000). The effect of organizational structure on perceptions of procedural fairness. *Journal of Applied Psychology*, 85(2), 294-304. doi:10.1037//0021-9010.85.2.294
- Schminke, M., Cropanzano, R., & Rupp, D. E. (2002). Organization structure and fairness perceptions: The moderating effects of organizational level. *Organizational Behavior and Human Decision Processes*, 89(1), 881-905.
doi:10.1016/S0749-5978(02)00034-1
- Schminke, M., Johnson, M. A., & Rice, D. (2015). Justice and organisational structure: A review. In R. Cropanzano & M. L. Ambrose (Eds.), *The Oxford handbook of justice in the workplace* (pp. 541–560). Oxford, UK: Oxford University Press.
- Schoorman, F. D., Mayer, R. C., & Davis, J. H. (2007). An integrative model of organizational trust: Past, present, and future. *Academy of Management Review*, 32(2), 344-354. doi:10.5465/AMR.2007.24348410

- Schoorman, F. D., Mayer, R. C., & Davis, J. H. (2016). Empowerment in veterinary clinics: The role of trust in delegation. *Journal of Trust Research*, 6(1), 76-90. doi:10.1080/21515581.2016.1153479
- Schwab, D. P. (2005). *Research methods for organizational studies* (2nd ed.). Mahwah, New Jersey, NJ: Lawrence Erlbaum Associates.
- Scott, B. A., Colquitt, J. A., & Zapata-Phelan, C. P. (2007). Justice as a dependent variable: Subordinate charisma as a predictor of interpersonal and informational justice perceptions. *Journal of Applied Psychology*, 92(6), 1597-1609. doi:10.1037/00219010.92.6.1597
- Searle, R., Den Hartog, D. N., Weibel, A., Gillespie, N., Six, F., Hatzakis, T., & Skinner, D. (2011). Trust in the employer: The role of high-involvement work practices and procedural justice in European organizations. *The International Journal of Human Resource Management*, 22(5), 1069-1092. doi:10.1080/09585192.2011.556782
- Shrout, P. E. (1998). Measurement reliability and agreement in psychiatry. *Statistical Methods in Medical Research*, 7(3), 301-317. doi:10.1177/096228029800700306
- Siltaloppi, M., Kinnunen, U., & Feldt, T. (2009). Recovery experiences as moderators between psychosocial work characteristics and occupational well-being. *Work & Stress*, 23(4), 330-348. doi:10.1080/02678370903415572
- Smith, P., & Beaton, D. (2008). Measuring change in psychosocial working conditions: Methodological issues to consider when data are collected at baseline and one follow up time point. *Occupational and Environmental Medicine*, 65(4), 288-296. doi:10.1136/oem.2006.032144

- Smith, M. B., Wallace, J. C., Vandenberg, R. J., & Mondore, S. (2016). Employee involvement climate, task and citizenship performance, and instability as a moderator. *The International Journal of Human Resource Management*, 29(4), 615-636. doi.org/10.1080/09585192.2016.1184175
- Spector, P. E. (2006). Method variance in organizational research: Truth or urban legend? *Organizational Research Methods*, 9(2), 221-232.
doi:10.1177/1094428105284955
- Spector, P. E., Rosen, C. C., Richardson, H. A., Williams, L. J., & Johnson, R. E. (2017). A new perspective on method variance: A measure-centric approach. *Journal of Management*, (in press). doi:10.1177/0149206316687295.
- State Bank of Pakistan. (2016). Functions of SBP. Retrieved on September 29, 2016 from <http://www.sbp.org.pk/about/Func.asp>
- State Bank of Pakistan. (2015). Banks and Branches. Retrieved on September 29, 2016 from http://www.sbp.org.pk/publications/anu_stats/2015/Part-5/Appendix-II.pdf
- State Bank of Pakistan Publication. (2016). Number of banks and reporting branches. Retrieved on March 20, 2016 from http://www.sbp.org.pk/publications/schedule_banks/Dec-2015/Appendices.pdf
- Strom, D. L., Sears, K. L., & Kelly, K. M. (2014). Work engagement: The roles of organizational justice and leadership style in predicting engagement among employees. *Journal of Leadership & Organizational Studies*, 21(1), 71-82.
doi:10.1177/1548051813485437

- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S. Leinhardt (Ed.), *Sociological methodology* (pp. 290-312). Washington, DC: American Sociological Association.
- Sun, L. Y., Aryee, S., & Law, K. S. (2007). High-performance human resource practices, citizenship behavior, and organizational performance: A relational perspective. *Academy of Management Journal*, *50*(3), 558-577.
doi:10.5465/amj.2007.25525821
- Taylor, A. B., MacKinnon, D. P., & Tein, J. Y. (2008). Tests of the three-path mediated effect. *Organizational Research Methods*, *11*(2), 241-269.
doi:10.1177/1094428107300344
- Taylor, M. S., Tracy, K. B., Renard, M. K., Harrison, J. K., & Carroll, S. J. (1995). Due process in performance appraisal: A quasi-experiment in procedural justice. *Administrative Science Quarterly* (40)3, 495-523.
doi:10.2307/2393795
- The World Bank (2018). Retrieved on June 2018, from
<https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS?locations=PK>
- Thibaut, J., & Walker, L. (1978). A theory of procedure. *California Law Review*, (66)3, 541-566.
- Till, R. E., & Karren, R. (2011). Organisational justice perceptions and pay level satisfaction. *Journal of Managerial Psychology*, *26*(1), 42-57.
doi:10.1108/02683941111099619
- Tremblay, M., Cloutier, J., Simard, G., Chênevert, D., & Vandenberghe, C. (2010). The role of HRM practices, procedural justice, organizational support and trust in organizational commitment and in-role and extra-role performance.

The International Journal of Human Resource Management, 21(3), 405-433.

doi:10.1080/09585190903549056

Tyler, T. R. & Lind, E. A. (1992). A relational model of authority in groups. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 115-92). New York: Academic Press.

Tyler, T. R., & Blader, S. L. (2003). The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review*, 7(4), 349-361. doi:10.1207/S15327957PSPR0704_07

Valente, M. J., & MacKinnon, D. P. (2017). Comparing models of change to estimate the mediated effect in the pretest–posttest control group design. *Structural Equation Modeling: A Multidisciplinary Journal*, 24(3), 428-450. doi:10.1080/10705511.2016.1274657

Van den Bos, K., Lind, E. A., & Wilke, H. A. M. (2001). The psychology of procedural and distributive justice viewed from the perspective of fairness heuristic theory. In R. Cropanzano (Ed.), *Justice in the workplace: From theory to practice* (Vol. 2, pp. 49-66). Mahwah, NJ: Erlbaum.

Van den Bos, K., & Lind, E. A. (2002). Uncertainty management by means of fairness judgments. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 34, pp. 1-60). Boston, MA: Elsevier.

Vandenberg, R. J., Richardson, H. A., & Eastman, L. J. (1999). The impact of high involvement work processes on organisational effectiveness: A second-order latent variable approach. *Group & Organisation Management*, 24(3), 300-339. doi:10.1177/1059601199243004

- Vigoda-Gadot, E., & Talmud, I. (2010). Organizational politics and job outcomes: The moderating effect of trust and social support. *Journal of Applied Social Psychology, 40*(11), 2829-2861. doi:10.1111/j.1559-1816.2010.00683.x
- Wall, T. D., & Wood, S. J. (2005). The romance of human resource management and business performance, and the case for big science. *Human Relations, 58*(4), 429-462. doi:10.1177/0018726705055032
- Walton, R. E. (1985). From control to commitment in the workplace. *Harvard Business Review, 63*(2), 76-84.
- Wang, M., Beal, D. J., Chan, D., Newman, D. A., Vancouver, J. B., & Vandenberg, R. J. (2017). Longitudinal research: A panel discussion on conceptual issues, research design, and statistical techniques. *Work, Aging and Retirement, 3*(1), 1-24. doi:10.1093/workar/waw033
- Weir, J. P. (2005). Quantifying test-retest reliability using the intraclass correlation coefficient and the SEM. *Journal of Strength and Conditioning Research, 19*(1), 231-240.
- Wheaton, B., Muthen, B., Alwin, D. F., & Summers, G. F. (1977). Assessing reliability and stability in panel models. *Sociological Methodology, 8*(1), 84-136. doi:10.2307/270754
- Whitener, E. M., Brodt, S. E., Korsgaard, M. A., & Werner, J. M. (1998). Managers as initiators of trust: An exchange relationship framework for understanding managerial trustworthy behavior. *Academy of Management Review, 23*(3), 513-530. doi:10.5465/amr.1998.926624
- Willett, J. B. (1988). Questions and answers in the measurement of change. In E. Z. Rothkopf (Ed.), *Review of research in education* (Vol. 15, pp. 345-422). Washington, DC: American Educational Research Association.

- Willett, J. B. (1997) Measuring change: What individual growth modeling buys you. In E. Amsel & K. A. Reninger (Eds.), *Change and development: Issues of theory, method, and application* (pp. 213-243). New Jersey, NJ: Erlbaum.
- Williams, J., & MacKinnon, D. P. (2008). Resampling and distribution of the product methods for testing indirect effects in complex models. *Structural Equation Modeling, 15*(1), 23-51. doi:10.1080/10705510701758166
- Williams, L. J., Vandenberg, R. J., & Edwards, J. R. (2009). Structural equation modelling in management research: A guide for improved analysis. *The Academy of Management Annals, 3*(1), 543-604.
doi:10.1080/19416520903065683
- Williams, R. H., & Zimmerman, D. W. (1996). Are simple gain scores obsolete? *Applied Psychological Measurement, 20*(1), 59-69.
doi:10.1177/014662169602000106
- Williams, R. H., Zimmerman, D. W., & Mazzagatti, R. D. (1987). Large sample estimates of the reliability of simple, residualized, and base-free gain scores. *The Journal of Experimental Education, 55*(2), 116-118.
doi:10.1080/00220973.1987.10806443
- Witt, L. A., Andrews, M. C., & Kacmar, K. M. (2000). The role of participation indecision-making in the organizational politics-job satisfaction relationship. *Human Relations, 53*(3), 341-358. doi:10.1177/0018726700533003
- Witt, L. A., Treadway, D. C., & Ferris, G. R. (2004). The role of age in reactions to organizational politics perceptions. *Organizational Analysis, 12*(1), 39-52.
doi:10.1108/eb028985

- Wood, S. (1999). Human resource management and performance. *International Journal of Management Reviews*, 1(4), 367-413. doi:10.1111/1468-2370.00020
- Wood, S., & de Menezes, L. M. (2008). Comparing perspectives on high involvement management and organizational performance across the British economy. *The International Journal of Human Resource Management*, 19(4), 639-683. doi:10.1080/09585190801953673
- Wood, S., & de Menezes, L. M. (2011). High involvement management, high performance work systems and well-being. *The International Journal of Human Resource Management*, 22(7), 1586-1610. doi:10.1080/09585192.2011.561967
- Wood, S. J., & Wall, T. D. (2007). Work enrichment and employee voice in human resource management-performance studies. *The International Journal of Human Resource Management*, 18(7), 1335-1372. doi:10.1080/09585190701394150
- Wood, S., Burridge, M., Rudloff, D., Green, W., & Nolte, S. (2015). Dimensions and location of high-involvement management: Fresh evidence from the UK Commission's 2011 Employer Skills Survey. *Human Resource Management Journal*, 25(2), 166-183. doi:10.1111/1748-8583.12064
- Wood, S., & Ogbonnaya, C. (2018). High-involvement management, economic recession, well-being, and organizational performance. *Journal of Management*, 44(8), 3070-3095. doi:10.1177/0149206316659111
- Wood, S., Van Veldhoven, M., Croon, M., & de Menezes, L. M. (2012). Enriched job design, high involvement management and organizational performance:

- The mediating roles of job satisfaction and well-being. *Human Relations*, 65(4), 419-445. doi:10.1177/0018726711432476
- Wu, P. C., & Chaturvedi, S. (2009). The role of procedural justice and power distance in the relationship between high performance work systems and employee attitudes: A multilevel perspective. *Journal of Management*, 35(5), 1228-1247. doi:10.1177/0149206308331097
- Yang, Y. C. (2012). High-involvement human resource practices, affective commitment, and organizational citizenship behaviours. *The Service Industries Journal*, 32(8), 1209-1227. doi:10.1080/02642069.2010.545875
- Yang, J., Treadway, D. C., & Stepina, L. P. (2013). Justice and politics: Mechanisms for the underlying relationships of role demands to employees' satisfaction and turnover intentions. *Journal of Applied Social Psychology*, 43(8), 1624-1635. doi:10.1111/jasp.12115
- Yin, P., & Fan, X. (2001). Estimating R² shrinkage in multiple regression: A comparison of different analytical methods. *The Journal of Experimental Education*, 69(2), 203-224. doi:10.1080/00220970109600656
- Zapata-Phelan, C. P., Colquitt, J. A., Scott, B. A., & Livingston, B. (2009). Procedural justice, interactional justice, and task performance: The mediating role of intrinsic motivation. *Organizational Behavior and Human Decision Processes*, 108(1), 93-105. doi:10.1016/j.obhdp.2008.08.001
- Zapf, D., Dormann, C., & Frese, M. (1996). Longitudinal studies in organizational stress research: A review of the literature with reference to methodological issues. *Journal of Occupational Health Psychology*, 1(2), 145-169. doi:10.1037/1076-8998.1.2.145

- Zhang, H., & Agarwal, N. C. (2009). The mediating roles of organizational justice on the relationships between HR practices and workplace outcomes: An investigation in China. *The International Journal of Human Resource Management*, 20(3), 676-693. doi:10.1080/09585190802707482
- Zimmerman, D. W. (2009). The reliability of difference scores in populations and samples. *Journal of Educational Measurement*, 46(1), 19-42.
doi:10.1111/j.1745-3984.2009.01067.x
- Zimmerman, D. W., & Williams, R. H. (1998). Reliability of gain scores under realistic assumptions about properties of pre-test and post-test scores. *British Journal of Mathematical and Statistical Psychology*, 51(2), 343-351.
doi:10.1111/j.2044-8317.1998.tb00685.x
- Zimmerman, D. W., & Zumbo, B. D. (2015). Resolving the issue of how reliability is related to statistical power: Adhering to mathematical definitions. *Journal of Modern Applied Statistical Methods*, 14(2), 9-26.
doi:10.22237/jmasm/144635064

Appendix A. Banks' Branch Addresses and Surveys Distribution Summary

		Surveys Distributed T1	Surveys Received T1	Surveys Distributed T2	Surveys Received T2
	Habib Bank Limited (HBL) – Lahore	134	78	73	46
1.	Anarkali Branch, Lahore	8	0	0	0
2.	Badami Bagh Lahore	7	4	4	3
3.	Saddar Bazar Lahore	12	8	6	4
4.	Samanabad Lahore	6	5	5	3
5.	383-384 Model Town Lahore	8	4	4	3
6.	Mughalpura Lahore	11	6	6	3
7.	394- Gulberg III Lahore	8	5	5	3
8.	Moon Market Iqbal Town Lahore	6	2	2	2
9.	Ichra Ferozpur Road Lahore	9	5	5	3
10.	Johar Town Main Boulevard Lahore	6	6	6	4
11.	19 Ali Block, New Garden Town Lahore	11	4	4	2
12.	LDA Plaza Egerton Road Lahore	12	6	5	3
13.	Shadman Market Lahore	6	6	6	4
14.	Jail Road Lahore	5	3	3	3
15.	Panorama Centre, The Mall Lahore	7	5	5	2
16.	Z-Block DHA Lahore	12	9	7	4
	HBL – Karachi	126	75	73	35
17.	Paposh Nagar Nazim Abad 5 Karachi	14	8	8	3

18.	Taimuria Market Nazim Abad Karachi	7	4	4	2
19.	PAF Main Shahrah e Faisal Karachi	13	8	7	3
20.	HBL Building Shaeed Millat Road Karachi	9	5	5	3
21.	Hassan Square Gulshan e Iqbal Karachi	10	3	3	3
22.	283- Memon Goth Malir Karachi	11	8	7	2
23.	HBL Plaza I.I Chunrighar Road Karachi	9	6	6	4
24.	PNSC Building MT Khan Road Karachi	6	0	0	0
25.	Block 7, Clifton Karachi	8	5	5	2
26.	Khayaban e Bukhari Phase 4 DHA Karachi	5	5	5	3
27.	FHA West Wharf Road Karachi	4	3	3	2
28.	Defense Phase 2 Korangi Raod Karachi	12	8	8	4
29.	Tibet Centre Jinnah Road Karachi	10	7	7	2
30.	State Life Building, A Haroon Raod Karachi	8	5	5	2
	HBL – Islamabad/Rawalpindi	107	71	69	41
31.	Waljis Building, Aabpara Market Islamabad	12	9	9	5
32.	Civic Centre Markaz G6 IBD	8	5	5	4
33.	HB Tower, Jinnah Avenue, Blue Area IBD	10	5	5	3
34.	F6 Super Market Islamabad	12	6	6	4
35.	109-E, Jinnah Avenue, Blue Area IBD	11	6	6	4
36.	Opp GPO Jinnah road, The Mall Rawalpindi	8	5	5	2
37.	Rose Arcade Satellite Town Rawalpindi	14	10	9	5
38.	Oriental Building, Bank Square, RWP	13	9	9	5
39.	Satellite Town Rawalpindi	10	10	10	6
40.	Admajee Road Sadder RWP	9	6	5	3
	Muslim Commercial Bank (MCB) Limited – Lahore	146	98	94	50

41.	76-Anarkali Bazar, Lahore.	11	6	6	3
42.	Ittehad Bazar Azam Cloth Market, Lahore.	15	11	10	5
43.	Main Market, Gulberg, Lahore	16	10	10	6
44.	Misri Shah Mehar Park Lahore	8	6	6	4
45.	42-Lower Mall Lahore	12	8	8	3
46.	27-Egerton Road Lahore	18	11	9	4
47.	46-Cabvalry Ground Extension, Lahore Cantt	10	7	7	4
48.	317-Z, Phase-III, DHA Lahore Cantt	13	8	8	4
49.	43-Jail Road Lahore	13	10	10	6
50.	122A Shadman Colony Lahore	12	10	9	5
51.	Satluj Block, Moon Market, Iqbal Town Lahore	7	4	4	2
52.	942-B Faisal Town Lahore	11	7	7	4
	MCB – Karachi	152	88	83	44
53.	Al-Asif Square, Sohrab Goth Karachi	16	11	10	5
54.	Alliance Arcade, Block-15, Gulistan-e-Jauhar, Karachi	13	6	6	4
55.	Block 13-C, University Road, Gulshan e Iqbal	17	5	5	3
56.	Mustafa Market Block G North Nazim Abad Karachi	18	13	12	5
57.	Aligarh Colony, Orangi Town Karachi	14	11	9	6
58.	Asif Arcade Bahadur Abad KARachi	15	12	11	4
59.	Clifton Braodway Building, Clifton Road KHI	16	9	9	4
60.	KDA Scheme 1 Karachi	14	5	5	4
61.	9 Commercial Street DHA Phase IV Kahi	15	7	7	5
62.	Ali Manzil Bombay Bazar KHI	14	9	9	4
	MCB – Islamabad/Rawalpindi	94	41	40	32
63.	F-10 Markaz Islamabad	11	5	4	4

64.	King Arcade, F-7 Markaz, Islamabad	9	6	6	5
65.	F-8 Markaz Islamabad	12	7	7	5
66.	Islamabad Stock Exchange Tower, Blue Area, Islamabad.	6	0	0	0
67.	Park Plaza, F-9, Markaz, Islamabad.	8	4	4	3
68.	61-E, Usman Plaza, Rawalpindi	9	5	5	4
69.	Murree Road, Faizabad, Rawalpindi	11	5	5	3
70.	Raja Bazar Rawalpindi	13	7	7	6
71.	32-Saddar Road, Feroze Sons Building, Rawalpindi Cantt.	8	0	0	0
72.	Opposite Naz Cinema, Rawalpindi	7	2	2	2
	United Bank Limited (UBL) – Lahore	130	65	64	40
73.	40B Faisal Town Lahore	13	7	7	4
74.	Moulana Shoukat Ali Road, Johar Town LHR	9	6	6	4
75.	Block-G, Phase-I, D.H.A, Lahore Cantt, Lahore	12	0	0	0
76.	Model Town Bank Square Market Model Town Lahore	8	0	0	0
77.	Plot No.21, Block-Z, DHA, Lahore	12	6	6	4
78.	Bakhshi Market Anarkali Lahore	11	7	7	3
79.	Sadar Bazar Lahore Cantt	10	7	7	5
80.	Azam Cloth Market Lahore	10	6	6	5
81.	Main Market Gulberg Lahore	12	9	8	4
82.	59-The Mall, Lahore	13	6	6	4
83.	32-Garden Block, New Garden Town, Lahore,	9	4	4	4
84.	Shadman Market Shadman Lahore	11	7	7	3
	UBL – Karachi	138	75	71	39
85.	Civic Centre, Kda Building, Gulshan-E-Iqbal, Karachi	18	11	11	5
86.	Amber Tower, Shahrah-E- Faisal Karachi	17	12	11	6

87.	Abc Appartment, Block-4, North Nazimabad, Karachi.	14	6	6	3
88.	Ground Floor, Saghir Centre, Rashid Minshas Road, Karachi	18	12	11	5
89.	Nagan Chowrangi, North Karachi	16	7	7	5
90.	Ground Floor, Shaheen Centre, Clifton, Karachi	18	8	8	4
91.	Block-9, Kda Scheme No.5, Clifton, Karachi	18	12	10	6
92.	23-Adam Arcade Bahadurabad Karachi	19	7	7	5
	UBL – Islamabad/Rawalpindi	104	55	53	36
93.	Khayaban-e-Serwardi, Aabpara IBD	21	14	12	7
94.	Islamabad Super Market	14	7	7	6
95.	F8 Markaz Islamabd	22	11	11	7
96.	Panorama Centre Saddar Rawalpindi	16	9	9	6
97.	Satellite Town Rawalpindi	18	9	9	5
98.	Faizabad Mauree Road Rawalpindi	13	5	5	5
	Allied Bank Limited (ABL) – Lahore	96	56	55	31
99.	Azam Market Lahore	11	8	8	5
100.	59-The Mall Lahore	9	0	0	0
101.	Main Market Gulberg	12	6	6	3
102.	Shadman Market Shadman Lahore	11	8	8	5
103.	B Block Faisal Lahore	7	6	6	4
104.	Moon Market Iqbal Town Lahore	14	11	11	6
105.	Model Town Bank Square Market Model Town Lahore	10	5	4	4
106.	Plot No.21, Block-Z, Dha, Lahore	9	8	8	2
107.	Saadr Bazar Lahore Cantt	13	4	4	2
	ABL – Karachi	88	49	47	33
108.	Farzana Building, Shaheed-E- Millat Road Karachi	12	9	9	5

109.	23-Adam Arcade Bahadurabad Karachi	11	5	5	5
110.	89-A,Block-2,Khalid Bin Waleed Road Karachi	9	4	4	3
111.	Habib Chamber Jodia Bazar. Karachi	10	3	3	3
112.	Saima Trade Tower, I.I. Chundrigar Road, Karachi.	10	8	7	5
113.	Ground Floor, Bahria Complex No. 1, M.T. Khan Road, Karachi	9	5	5	3
114.	Clifton, Broadway, Khayaban-E Iqbal KHI	8	6	6	4
115.	Civic Centre, Kda Building, Gulshan-E-Iqbal, Karachi	11	9	8	5
116.	Block-2,Main Shahrah-E Faisal, Nursery, KHI	8	0	0	0
	ABL – Islamabad/Rawalpindi	58	32	32	26
117.	Jinnah Super market Islamabad	10	6	6	4
118.	Civic Centre Islamabad	8	6	6	5
119.	Khayaban-E-Serwardi, Islamabad, Aabpara	11	5	5	5
120.	Saddar Rawalpindi Cantt	9	6	6	5
121.	Raja Bazar Rawalpindi	12	7	7	5
122.	Satellite Town Rawalpindi	8	2	2	2
	Bank Al-Habib Limited – Lahore	128	79	73	30
123.	7, Chenab Block, Main Boulevard, Allama Iqbal Town, Lahore	15	10	8	5
124.	52, Brandreth Road, Chowk Dalgirah,Lahore	21	14	12	5
125.	3-E, Main Market, Gulberg, Lahore	18	11	11	4
126.	13-G, Johar Town, Lahore	21	12	11	5
127.	Shahrah-e-Quaid-e-Azam, Lahore.	17	8	8	4
128.	120-Shadman Colony, Main Boulevard, Lahore	16	11	11	3
129.	82-Y Commercial, Phase III, Defence Housing Authority, Lahore	20	13	12	4
	Bank Al Habib – Karachi	78	52	49	26
130.	Phase IV, Defence Housing Authority.	14	11	11	6

131.	Central Commercial Area, Bahadurabad, Karachi.	18	14	13	5
132.	Al-Burhan Arcade, Block-E, North Nazimabad, Karachi.	16	11	9	5
133.	Centrum Shopping Mall, Rashid Minhas Road, Karachi	17	8	8	6
134.	18, Jahangir Mansion, M. A. Jinnah Road, Karachi.	13	8	8	4
	Bank Al Habib – Islamabad/Rawalpindi	60	40	40	25
135.	Ground Floor, Khayaban-e-Suharwardy, Aabpara Market, Sector G-6, Islamabad	20	14	14	8
136.	Razia Sharif Plaza, Jinnah Avenue, Blue Area, Islamabad	13	10	10	6
137.	A - 81, City Saddar Road, Rawalpindi	15	9	9	5
138.	128-B, Block "B", Satellite Town, Murree Road, Rawalpindi	12	7	7	6
	Meezan Bank Limited – Lahore	62	39	38	25
139.	61 Chandni Chowk, Azam Cloth Market, Lahore.	11	7	7	4
140.	210-Main Poonch Road, Samanabad, Lahore	8	5	5	4
141.	91 Shadman Colony - 1, Shadman, Lahore.	14	7	6	5
142.	181 C-Block, Bank Square, Model Town, Lahore.	8	6	6	4
143.	Ground Floor, Usman Arcade, Main Boulevard, DHA, Lahore.	12	7	7	3
144.	60 - Main Boulevard Gulberg, Lahore.	9	7	7	5
	Meezan Bank Limited – Karachi	46	23	22	15
145.	Baber Market, Landhi Township, Karachi.	7	4	4	3
146.	Gul Tower Opp. SBP I. I. Chundrigar Road Karachi.	6	3	3	3
147.	Ranchore Quarters, Prince Street, Karachi.	9	6	5	4
148.	Ground Floor at 37-A, Lalazar Area, Off M.T. Khan Road, KHI	7	5	5	3
149.	KDA Scheme 24, University Road, Gulshan-e-Iqbal, Karachi.	8	5	5	2
150.	Ground Floor, Block B, FTC Building, Shahr-ae-Faisal, Karachi.	9	0	0	0
	Meezan Bank Limited – Islamabad/Rawalpindi	64	38	34	19

151.	37-B, Tahir Plaza, Blue Area Jinnah Avenue, Islamabad.	15	10	9	4
152.	Aabpara Market, Sector G-6, Islamabad.	16	7	7	5
153.	47/62, Bank Road Saddar, Rawalpindi.	11	8	8	5
154.	Satellite Town, Chandani Chowk, Murree Road, Rawalpindi.	22	13	10	5
	Bank Al Falah Limited – Lahore	68	41	40	29
155.	Mall Road Lahore	11	9	9	7
156.	73, Z Block, DHA Phase - III - Lahore	14	9	8	5
157.	Raheem Centre, Akbar Block, Azam Cloth Market, Lahore	13	7	7	6
158.	32E-Main Market Gulberg II Lahore	11	8	8	6
159.	88-Shadman Market Shadman Lahore	11	8	8	5
160.	Main Boulevard Iqbal Town Lahore	8	0	0	0
	Bank Al Falah Limited – Karachi	60	35	32	25
161.	166 M. A. Jinnah Road, near Light House Karachi	10	4	3	2
162.	Prime Arcade, Bahadur Shah Zafar Road, Bahadurabad, KHI	12	7	7	5
163.	B.A. Building, I.I.Chundrigar Road, Karachi	8	3	3	3
164.	Yasir Main Rashid Minhas Road, Gulshan-e-Iqbal, Karachi	13	10	8	6
165.	Commercial Area , Block 7, Liaquatabad, Karachi	9	5	5	4
166.	124/A, Block 2, P.E.C.H.S., Main Tariq Road, Karachi	8	6	6	5
	Bank Al Falah Limited – Islamabad/Rawalpindi	34	25	25	20
167.	Abpara Market Islamabad	9	7	7	6
168.	1-B, Awan Arcade, Jinnah Avenue, Blue Area, Islamabad	10	7	7	5
169.	Adamjee Road, Saddar, Rawalpindi Cantt.	8	6	6	5
170.	B/20, North Star Plaza, Satellite Town, Murree Road, Rawalpindi	7	5	5	4
	Askari Bank Limited – Lahore	51	24	23	18
171.	13-D, Faisal Town, Lahore	7	0	0	0

172.	14-Pak Block Iqbal Town Lahore	12	6	6	6
173.	5-C, Fawara Chowk, Shah Alam Market, Lahore	8	6	6	5
174.	172, Park Lane Towers, Tufail Road, Lahore Cantt	9	5	5	3
175.	5-E Main Market , Gulberg II Lahore	8	7	6	4
176.	6/7 Shalimar Link Road Baghbanpura Lahore	7	0	0	0
	Askari Bank Limited – Karachi	45	19	19	15
177.	Rashid Minhas Road, Gulistan-e-Jauhar, Karachi	7	3	3	3
178.	Saima Trade Tower I.I. Chundrigar Road, Karach	8	4	4	3
179.	Regal Chowk Preedy Street Saddar Karachi	6	2	2	2
180.	Asia Pacific Trade Centre,Gulistan-e-Jauhar, Karachi	7	4	4	2
181.	SB-08, Block-13-B, K.D.A Scheme # 24 University Road Gulshan-e-Iqbal, Karachi	9	6	6	5
182.	Fatima Jinnah Road, Saddar, Karachi	8	0	0	0
	Askari Bank Limited – Islamabad/Rawalpindi	36	15	15	12
183.	24-D, Rasheed Plaza, Jinnah Avenue, Blue Area Islamabad	10	6	6	5
184.	13-I, F-7 Markaz, Jinnah Super Market, Islamabad	8	0	0	0
185.	E-20-26, College Road, Rawalpindi	8	5	5	4
186.	Midway Centrum Plaza, 6th. Road, Murree Road, Satellite Town, Rawalpindi.	10	4	4	3
	Bank Islami – Lahore	42	27	26	21
187.	4-A, Asif Block, Allama Iqbal Town, Lahore	10	7	7	6
188.	28- Ali Block, Garden Town, Lahore	12	5	5	4
189.	F-1207 Azam Cloth Market Lahore	9	7	6	4
190.	11-E, Main Market, Gulberg, Lahore	11	8	8	7
	Bank Islami – Karachi	39	21	21	17

191.	KDA Scheme No#7 Main University Road, Chandni Chowk, KHI	11	5	5	4
192.	2B Unique Centre, Blcok A, North Nazimabad, Karachi	9	3	3	3
193.	Plot No. 35, Block-5 Cantt Bazar, Malir Cantt Karachi	10	7	7	5
194.	Rashid Minhas Road Branch, Block-5, Gulshan-e-Iqbal Karachi.	9	6	6	5
	Bank Islami – Islamabad/Rawalpindi	31	11	11	9
195.	Shop No. 9, Block- 8, Civic Centre, G-6, Melody Market, IBD	8	5	5	3
196.	17-23, Sharjah Centre, G-10 Markaz, Islamabad.	7	3	3	3
197.	69/B, 4th Road, Satellite Town, Rawalpindi, Pakistan.	8	3	3	3
198.	Shop No. A-308/E, Jinnah Road, (City Saddar Road) Rawalpindi.	8	0	0	0
	Faysal Bank Limited – Lahore	38	19	19	15
199.	59-A, Main Boulevard, Gulberg, Lahore.	10	6	6	6
200.	310-Upper Mall Shahrah-e-Quaid-e-Azam, Lahore	7	0	0	0
201.	18-Hunza Block, Main Road, Allama Iqbal Town, Lahore	12	7	7	5
202.	13-Bank Square Market, Model Town, Lahore	9	6	6	4
	Faysal Bank Limited – Karachi	37	16	16	11
203.	Hashmi Electronics Centre, Abdullah Haroon Road, Saddar KHI	10	5	5	3
204.	11/13, Trade Centre, I.I Chundrigarh Road, Karachi.	8	2	2	2
205.	Business Avenue Centre, Block # 6,P.E.C.H.SShahrah- e Faisal	10	6	6	5
206.	Ismail Trade Centre, Ram Bharti Street, Jodia Bazar, Karachi.	9	3	3	1
	Faysal Bank Limited – Islamabad/Rawalpindi	32	16	16	13
207.	15-West, Jinnah Avenue Blue Area, Islamabad.	6	0	0	0
208.	12 D, Jinnah Supermarket, F-7 Markaz, Islamabad.	10	7	7	4
209.	5TH Road, City Shopping Centre, Commercial Market, Satellite Town - Rawalpindi	8	4	4	4

210.	U-I, Iqbal Road, Fawara Chowk, Raja Bazar, Rawalpindi	8	5	5	5
	Jahangir Siddiqui (JS) Bank Limited – Lahore	42	22	20	16
211.	F -1753, Mohallah Sareen, Azam Cloth Market, Lahore	11	4	4	4
212.	312, Block Y Phase III, DHA, Lahore Cantt, Lahore.	12	8	7	5
213.	201 A, Upper Mall, Lahore	10	4	4	4
214.	72, 173, Bank Square, Market Model Town, Lahor	9	6	5	3
	JS Bank Limited – Karachi	33	16	16	13
215.	Shop # 1, 2 & 3, Saima Plaza, Near Disco Bakery, Gulshan-e-Iqbal, Karachi (Gulshan Chowrangi Branch)	8	5	5	4
216.	AGI Tijarah Centre, Plot # 32-1-A, Block 6, PECHS, ShaHra-e-Faisal, Karachi	9	5	5	4
217.	Jodia Bazar, Shop # 7 & 8-A, Rampat Row Khori Garden Market Quarters, Karachi	6	0	0	0
218.	Roshanara Building Shop # 2, Light House, M.A.Jinnah Road, Karachi.	10	6	6	5
	JS Bank Limited – Islamabad/Rawalpindi	28	14	13	10
219.	I-E, Ali Plaza Blue Area, Islamabad	8	4	4	3
220.	Plot # 21, Qublai Resturant, F-7, Markaz, Islamabad	6	0	0	0
221.	Plot # 26, Bank Road Branch Saddar Cantt, Rawalpind	5	4	4	2
222.	Ground & First Floor, B-72, Commemrcial Market Chowk, Satellite Town, Rawalpindi.	9	6	5	5
	Soneri Bank Limited – Lahore	42	23	23	16
223.	Bank Square Market 1-C Model Town Lahore	16	11	11	7
224.	87 Shahrah-e-Quaid-e-Azam, Lahore	4	0	0	0
225.	49/2-B, Circular Road Lahore	12	5	5	3
226.	17-Gulshan Block Allama Iqbal Town Lahor	10	7	7	6

	Soneri Bank Limited – Karachi	47	20	20	17
227.	105-108, Al-Rahim Tower, I.I. Chundrigar Road, Karachi	11	5	5	3
228.	D.S. 11-B-313, Market Quarters, Virjee Street, Jodia Bazar, Karachi	14	4	4	4
229.	684-C, Main Allama Iqbal Road, P.E.C.H.S., Off: Tariq Road, Karachi	9	6	6	5
230.	Crown Centre, Block No: 13-C, (KDA Scheme No: 24), Gulshan-e-Iqbal, Karachi	13	5	5	5
	Soneri Bank Limited – Islamabad/Rawalpindi	33	14	13	11
231.	68-W, Sama Plaza, Blue Area Islamabad	8	0	0	0
232.	Lower Ground Floor, Plot No: 14-B, Bank Plaza, G-9 Markaz Islamabad	6	3	3	3
233.	B-147, Block-B, Satellite Town Chandni Chowk, Murree Rd. RWP	9	5	5	4
234.	102-K, Hospital Road/Bank Road Saddar Rawalpindi Cantt.	10	6	5	4
	Habib Metropolitan Bank – Lahore	51	30	29	19
235.	85-D1, Main Boulevard, Gulberg III Lahore	15	9	9	5
236.	The Mall Road Branch Bank Square Lahore	9	5	5	4
237.	F-2183-A/1, Chora Khooh, Usman Farooq Bazar, Azam Cloth Market, Lahore	14	7	7	5
238.	119-Shadman Colony Shadman Lahore	13	9	8	5
	Habib Metropolitan Bank – Karachi	47	22	21	16
239.	Spencer’s Building, I.I Chundrigar Road Karachi	11	6	6	5
240.	Madarassa Islamia School Building, Adamjee Haji Dawood Road, Jodia Bazar Karachi	13	7	7	5
241.	3-Jinnah Society, Near Shaheed e Millat Fly over, Sharah e Faisal	14	9	8	6
242.	Block A, Main Rashid Minhas Road,, KDA Scheme 24 Karachi	9	0	0	0
	Habib Metropolitan Bank – Islamabad/Rawalpindi	31	21	21	17

243.	24-D Rashid Plaza Jinnah Avenue Islamabad	10	6	6	4
244.	1-k, 10th Avenue F-10 Markaz Islamabad	9	6	6	5
245.	156-/2 Bank Road, Rawalpindi	6	5	5	4
246.	M-1066, 6th Road Chowk, Muree Road, Rawalpindi	6	4	4	4
	Dubai Islamic Bank – Lahore	35	18	18	14
247.	Property No F-1469, F-1566, F-1567, Dabbi Bazaar Azam Cloth Market, Lahore	9	6	6	5
248.	34-35, Shahrah e Quaid e Azam, Mall Road, Lahore	7	0	0	0
249.	Ground Floor, Plot No.690, Main Boulevard, Shadman, LHR	8	6	6	4
250.	Commercial Plot No 130, C-Block, Bank Square Market Area, Model Town Lahore.	11	6	6	5
	Dubai Islamic Bank – Karachi	30	12	11	9
251.	Ground Floor,Shop No.23,Shaheen Heights, Block 7 Gulshane Iqbal Disco Bakery Karachi	9	5	5	4
252.	Business & Finance Centre, (Opp. State Bank of Pakistan) I. I. Chundrigar, Karachi	8	0	0	0
253.	A-16/23, Market Quarters, Market Road, Jodia Bazar, Karachi	6	4	4	3
254.	12-13, Progressive Centre, Block-B, Pakistan Employees Housing Society Ltd, Karachi	7	3	2	2
	Dubai Islamic Bank – Islamabad/Rawalpindi	38	19	18	14
255.	Roshan Centre, 78-W, Jinnah Avenue Blue Area, Islamabad	10	6	6	5
256.	Ground Floor, Plot No.14-B, G-9 Markaz Islamabad.	8	0	0	0
257.	Plot No. 67-A, Commercial, Satelite Town, Murree Road, RWP.	9	6	6	5
258.	G-240, Liaqat road, Raja bazaar, Rawalpindi	11	7	6	4
Column's total includes each banks' city total as well		5562	3108	2992	1940
Actual number of surveys distributed and received		2781	1554	1496	970

Appendix B. Ethics Application Approval

14 December 2015

Mark Le Fevre

Faculty of Business and Law

Dear Mark

Re Ethics Application: 15/384 High-involvement work processes, trust and employee engagement: The mediating role of organisational justice and politics.

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 14 December 2018.

As part of the ethics approval process, you are required to submit the following to AUTEC:

A brief annual progress report using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 14 December 2018;

A brief report on the status of the project using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>. This report is to be submitted either when the approval expires on 14 December 2018 or on completion of the project.

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this. If your research is undertaken within a jurisdiction outside New Zealand, you will need to make the arrangements necessary to meet the legal and ethical requirements that apply there.

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

All the very best with your research,



Kate O'Connor

Executive Secretary

Auckland University of Technology Ethics Committee

Cc:Iqbal Mehmood iqbal.mehmood@aut.ac.nz, Rachel Morrison; Felicity Lamm

Appendix C. Participant Information Sheet



Participant Information Sheet

Research Title

High-involvement Work Processes, Trust, and Employee Engagement: The Mediating Role of Organisational Justice and Politics

Dear participant

My name is Iqbal Mehmood and I am a PhD student at the Auckland University of Technology (AUT), Auckland, New Zealand. This research partially fulfils the requirements for the degree of Doctor of Philosophy in Management.

The main purpose of this research is to examine the underlying mechanisms through which systems of human resource management influence employees' work-related attitudes and behaviours such as and employees physical, emotional, and mental engagement with their work. This study explores the impact of organisational practices on employees' perceptions of organisational politics and justice.

Why are you receiving this questionnaire? For the purpose of this research data from ten private banks in Pakistan will be examined. All bank branches are randomly selected and all non-managerial bank employees who have worked for the last six months with the bank are invited to participate in this study.

Your participation is voluntary. If you chose to participate, and I hope you will, simply complete the questionnaire attached with this information sheet. It will be collected from you **next week**. This research will be conducted in two rounds. The second round of the survey will be conducted in four months.

How will my privacy be protected? Your responses to the questionnaire items will be **kept confidential** and no one other than myself will see them. You are receiving this questionnaire directly from me and it will be returned to me in a sealed envelope. Neither your branch manager nor any other management representative such as HR personnel are involved in this data collection processes. Your individual responses will never be shared with anybody within or outside of this organisation. Moreover, once the second round of the survey is completed your personal details will be detached and only aggregated coded data will be examined. Neither in the finished thesis, nor in any other publications will the names of the participants or their organisations be mentioned.

Please note that the completion of the questionnaire will be taken as your consent to participate.

It will take about **20 minutes** of your valuable Time to complete this questionnaire. I understand that you are very busy, however, your effort and Time is much appreciated.

The findings of this research will be in the form of a thesis, presentations, and publications.

If you are interested in receiving the summary of the main findings of this study please provide your e-mail address on the last page of the questionnaire.

What do I do if I have concerns about this research? Any concerns regarding the nature of this project should be notified in the first instance to the project supervisor, Dr Mark Le Fevre via email to mark.lefevre@aut.ac.nz or by Phone +64 9 921 9999 - ext. 7268.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEK, Kate O'Connor via email to ethics@aut.ac.nz or by phone +64 921 9999 ext. 6038.

Whom do I contact for further information about this research? You may contact the primary researcher (Iqbal Mehmood) via email to iqbal.mehmood@aut.ac.nz or by phone +64 9 921 9999 – ext. 4171.

Yours Sincerely

Iqbal Mehmood
PhD Student
Department of Management, Faculty of Business and Law,
AUT, Auckland, New Zealand

Approved by the Auckland University of Technology Ethics Committee on 14/12/2015, AUTEK Reference number 15/384.

Appendix D. The Questionnaire



Employees Work Experience Survey

Dear Participant

Please note that your participation in the survey is **voluntary**. To confirm this, please read and tick the following boxes.

Completion of this questionnaire will be taken as your consent to participate.

I agree that the researcher may contact me for the second round of the survey.

The main purpose of this research is to examine the underlying mechanisms through which systems of human resource management (HRM) influence employees' two work-related attitudes and behaviours: (a) and (b) employees physical, emotional, and mental engagement with their work. This study also examines the extent to which employees perceive that they are being treated fairly at work.

The findings of this research may help organisational practitioners and researchers to design jobs that benefit both employees and their organisations.

Your responses to the questionnaire items will be **kept confidential** and no one other than myself will see them.

If you want to participate in the research, and I hope you will, please complete this questionnaire. I or my friends who are helping me in this research will collect it from you in the next week. It will take about 20 minutes of your valuable Time to complete the questionnaire.

Thanking you in anticipation.

Yours Sincerely

Iqbal Mehmood

Part 1

This part of the questionnaire deals with the extent to which you place trust in your present employer (organization). For example, the extent to which you perceive that your employer is open or candid in communication, maintains high levels of integrity, and takes decisions that ultimately benefit employees. Or, in other words, the degree to which you trust in intentions and actions of your employer.

Please **circle** the number that most closely represents your perceptions about each statement.

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	I am not sure I fully trust my employer	1	2	3	4	5
2	My employer is open and upfront with me	1	2	3	4	5
3	I believe my employer has high integrity	1	2	3	4	5
4	In general, I believe my employer's motives and intentions are good	1	2	3	4	5
5	My employer is not always honest and truthful	1	2	3	4	5
6	I don't think my employer treats me fairly	1	2	3	4	5
7	I can expect my employer to treat me in a consistent and predictable manner	1	2	3	4	5

Part 2

This part of the questionnaire deals with your assessment about the extent to which you feel at work or about the work you do. More specifically, the extent to which you are physically, emotionally, and cognitively (mentally) engaged in the work or job you do. For example, you are fully absorbed in the work that Time flies, you feel enthusiastic at work, and you feel that your work is meaningful.

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	I work with intensity on my job	1	2	3	4	5
2	I exert my full effort to my job	1	2	3	4	5
3	I devote a lot of energy to my job	1	2	3	4	5
4	I try my hardest to perform well on my job	1	2	3	4	5
5	I strive as hard as I can to complete my job	1	2	3	4	5
6	I exert a lot of energy on my job	1	2	3	4	5
7	I am enthusiastic in my job	1	2	3	4	5
8	I feel energetic at my job	1	2	3	4	5
9	I am interested in my job	1	2	3	4	5
10	I am proud of my job	1	2	3	4	5
11	I feel positive about my job	1	2	3	4	5
12	I am excited about my job	1	2	3	4	5
13	At work, my mind is focused on my job	1	2	3	4	5
14	At work, I pay a lot of attention to my job	1	2	3	4	5
15	At work, I focus a great deal of attention on my job	1	2	3	4	5
16	At work, I am absorbed by my job	1	2	3	4	5
17	At work, I concentrate on my job	1	2	3	4	5
18	At work, I devote a lot of attention to my job	1	2	3	4	5

Part 3

This part of the questionnaire deals with your assessment of the extent to which you perceive that the decision-making in your organization is influenced by power and politics. This includes the policies of the organization, the behaviour of supervisors, and the actions of co-workers. For example, the extent to which organisational authorities adhere to policies and procedures and make decisions on merit rather than personal liking and disliking.

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	One group always get their way.	1	2	3	4	5
2	Influential group no one crosses.	1	2	3	4	5
3	Policy changes help only a few.	1	2	3	4	5
4	People build themselves up by tearing others down.	1	2	3	4	5
5	Favouritism not merit gets people ahead.	1	2	3	4	5
6	People here don't speak up for fear of retaliation.	1	2	3	4	5
7	Promotions go to top performers.	1	2	3	4	5
8	Rewards come to hard workers.	1	2	3	4	5
9	People are encouraged to speak out.	1	2	3	4	5
10	There is no place for yes men.	1	2	3	4	5
11	Pay and promotion policies are not politically applied.	1	2	3	4	5
12	Pay and promotion decisions are consistent with policies.	1	2	3	4	5

Part 4

This part of the questionnaire deals with your perceptions of the ways you are being rewarded and treated by your employer and immediate supervisor(s). This part has four sections: (a) the extent to which you perceive that decision making procedures are fair, (b) the extent to which you perceive that your outcomes (rewards) are fair relative to your inputs (efforts), (c) the extent to which you perceive that your supervisor treats you with respect, and (d) the extent to which you perceive that your supervisor provides you complete and honest information about decisions concerned to you.

Part 4: Section A

The questions below refer to the procedures your employer uses to make decisions about pay, rewards, evaluations, promotions, assignments, etc.

	To what extent:	To a very small extent	To a small extent	To a moderate extent	To a large extent	To a very large extent
1	Are you able to express your views and feelings during those procedures?	1	2	3	4	5
2	Can you influence the decisions arrived at by those procedures?	1	2	3	4	5
3	Are those procedures been applied consistently?	1	2	3	4	5
4	Are those procedures free of bias?	1	2	3	4	5
5	Are those procedures based on accurate information?	1	2	3	4	5
6	Are you able to appeal the decisions arrived at by those procedures?	1	2	3	4	5
7	Do those procedures uphold ethical and moral standards?	1	2	3	4	5

Part 4: Section B

The questions below refer to the procedures your employer uses to make decisions about pay, rewards, evaluations, promotions, assignments, etc.

	To what extent:	To a very small extent	To a small extent	To a moderate extent	To a large extent	To a very large extent
1	Do those outcomes reflect the effort you have put into your work?	1	2	3	4	5
2	Are those outcomes appropriate for the work you have completed?	1	2	3	4	5
3	Do those outcomes reflect what you have contributed to your work?	1	2	3	4	5
4	Are those outcomes justified, given your performance?	1	2	3	4	5

Part 4: Section C

The questions below refer to the interactions you have with your supervisor as decision-making procedures (about pay, rewards, evaluations, promotions, assignments, etc.) are implemented.

	To what extent:	To a very small extent	To a small extent	To a moderate extent	To a large extent	To a very large extent
1	Does your supervisor treat you in a polite manner?	1	2	3	4	5
2	Does your supervisor treat you with dignity?	1	2	3	4	5
3	Does your supervisor treat you with respect?	1	2	3	4	5
4	Does your supervisor refrain (avoid) from improper remarks or comments?	1	2	3	4	5

Part 4: Section D

The questions below refer to the explanations your supervisor offers as decision-making procedures (about pay, rewards, evaluations, promotions, assignments, etc.) are implemented.

	To what extent:	To a very small extent	To a small extent	To a moderate extent	To a large extent	To a very large extent
1	Is your supervisor candid in communications with you?	1	2	3	4	5
2	Does your supervisor explain decision procedures thoroughly?	1	2	3	4	5
3	Are your supervisor's explanations regarding the procedures reasonable?	1	2	3	4	5
4	Does your supervisor communicate details in a Timely manner?	1	2	3	4	5
5	Does your supervisor seem to tailor communications to individuals' specific needs?	1	2	3	4	5

Part 5

This part of the questionnaire deals with your assessment of some key aspects of your current job. For example, the extent to which: (a) you have opportunities to participate in work-related decisions, (b) you have access to the information concerned to you such as organisational performance, policies and procedures, (c) you have training and development opportunities to enhance your work-related skills and knowledge, (d) and finally, the extent to which you believe that rewards (e.g., pay and promotion) are linked with performance.

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	I have sufficient authority to fulfil my job responsibilities.	1	2	3	4	5
2	I have enough input in deciding how to accomplish my work.	1	2	3	4	5
3	I am encouraged to participate in decisions that affect me.	1	2	3	4	5
4	I have enough freedom over how I do my job.	1	2	3	4	5
5	I have enough authority to make decisions necessary to provide quality customer service.	1	2	3	4	5
6	For the most part, I am encouraged to participate in and make decisions that affect my day-to-day activities.	1	2	3	4	5
7	All in all, I am given enough authority to act and make decisions about my work.	1	2	3	4	5
8	Company policies and procedures are clearly communicated to employees.	1	2	3	4	5
9	Management gives sufficient notice to employees prior to making changes in policies and procedures.	1	2	3	4	5
10	Most of the Time I receive sufficient notice of changes that affect my work group.	1	2	3	4	5
11	Management takes Time to explain to employees the reasoning behind critical decisions that are made.	1	2	3	4	5
12	Management is adequately informed of the important issues in my department.	1	2	3	4	5
13	Management makes a sufficient effort to get the opinions and feelings of people who work here.	1	2	3	4	5

14	Management tends to stay informed of employee needs.	1	2	3	4	5
15	The channels of employee communication with top management are effective.	1	2	3	4	5
16	Top management communicates a clear organizational mission and how each division contributes to achieving that mission.	1	2	3	4	5
17	Employees of this company work toward common organizational goals.	1	2	3	4	5
18	My performance evaluations within the past few years have been helpful to me in my professional development.	1	2	3	4	5
19	There is a strong link between how well I perform my job and the likelihood of my receiving recognition and praise.	1	2	3	4	5
20	There is a strong link between how well I perform my job and the likelihood of my receiving a raise in pay/salary.	1	2	3	4	5
21	There is a strong link between how well I perform my job and the likelihood of my receiving high performance appraisal ratings.	1	2	3	4	5
22	Generally, I feel this company rewards employees who make an extra effort.	1	2	3	4	5
23	I am satisfied with the amount of recognition I receive when I do a good job.	1	2	3	4	5
24	If I perform my job well, I am likely to be promoted.	1	2	3	4	5
25	I am given a real opportunity to improve my skills at this company through education and training programs.	1	2	3	4	5
26	I have had sufficient job-related training.	1	2	3	4	5
27	My supervisor helped me acquire additional job-related training when I have needed it.	1	2	3	4	5
28	I receive ongoing training, which enables me to do my job better.	1	2	3	4	5
29	I am satisfied with the number of training and development programs available to me.	1	2	3	4	5
30	I am satisfied with the quality of training and development programs available to me.	1	2	3	4	5
31	The training and educational activities I have received enabled me to perform my job more effectively.	1	2	3	4	5
32	Overall, I am satisfied with my training opportunities.	1	2	3	4	5

Please fill the demographic information part of this questionnaire. Once the numbered data is entered in the computer software, to ensure your privacy and confidentiality, this part of the questionnaire will be detached. Your name will not be entered in the computer software.

Your Name:

Bank Name:

Branch:

Position:

Gender: MaleFemale

Your age at your last birth day:years

Time with current employer:yearsmonths

If you want to receive the summary of the main findings of this study, please provide your e-mail address here.....

Many thanks for your help and Time.

Appendix E. Normal Probability Plots

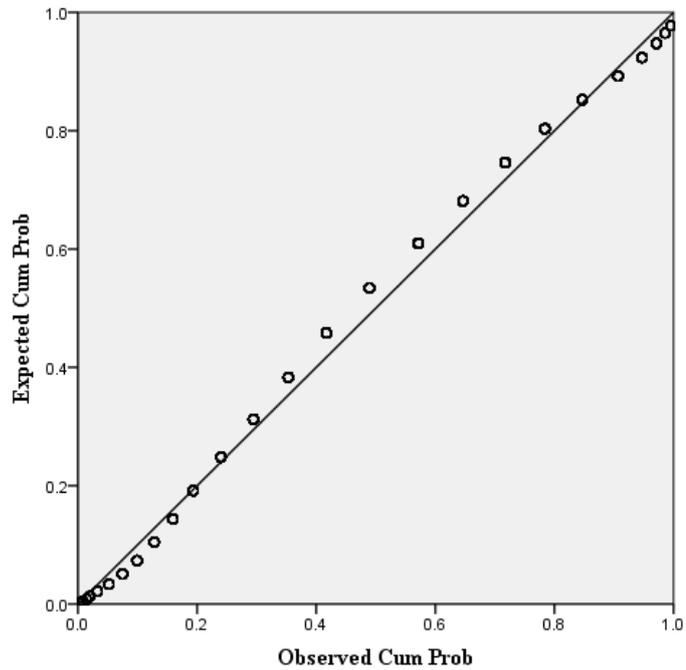


Figure E1. Normal probability plot of trust in employer

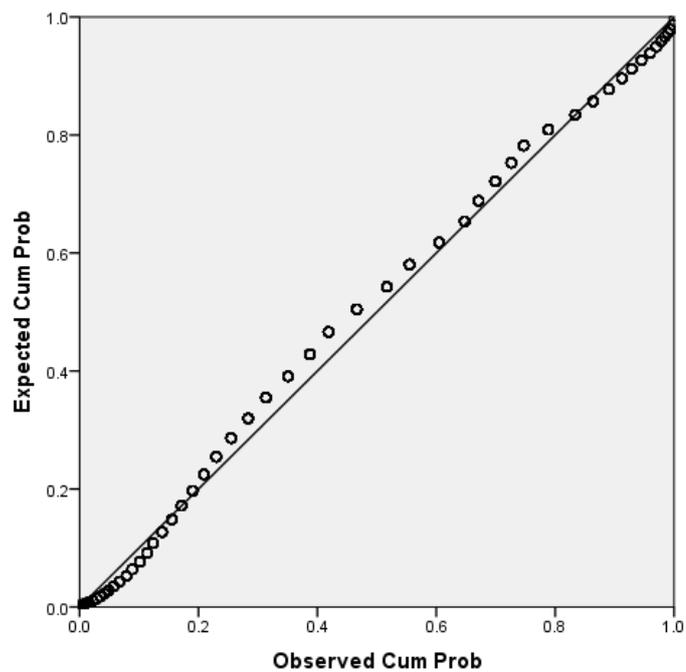


Figure E2. Normal probability plot of employee engagement

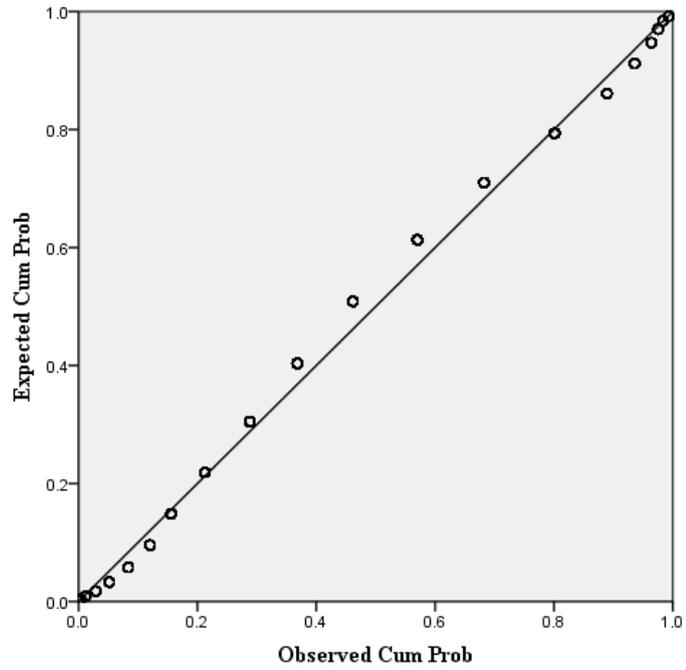


Figure E3. Normal probability plot of physical engagement

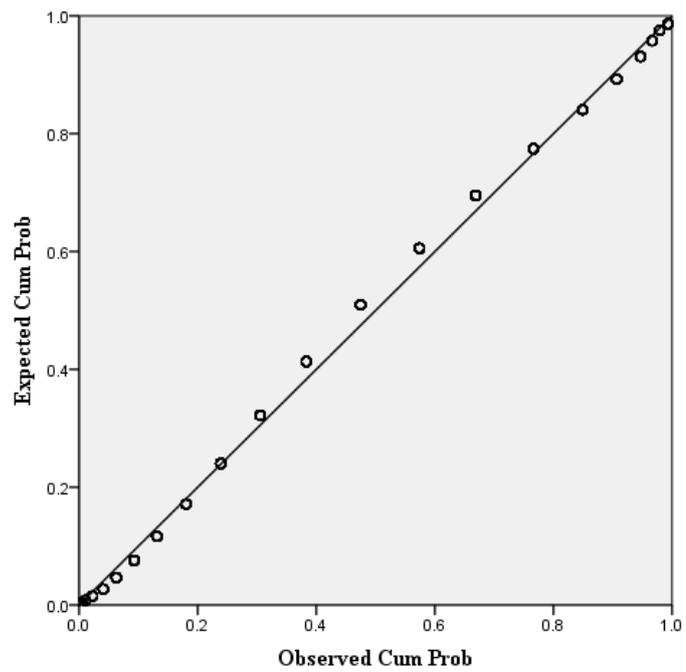


Figure E4. Normal probability plot of emotional engagement

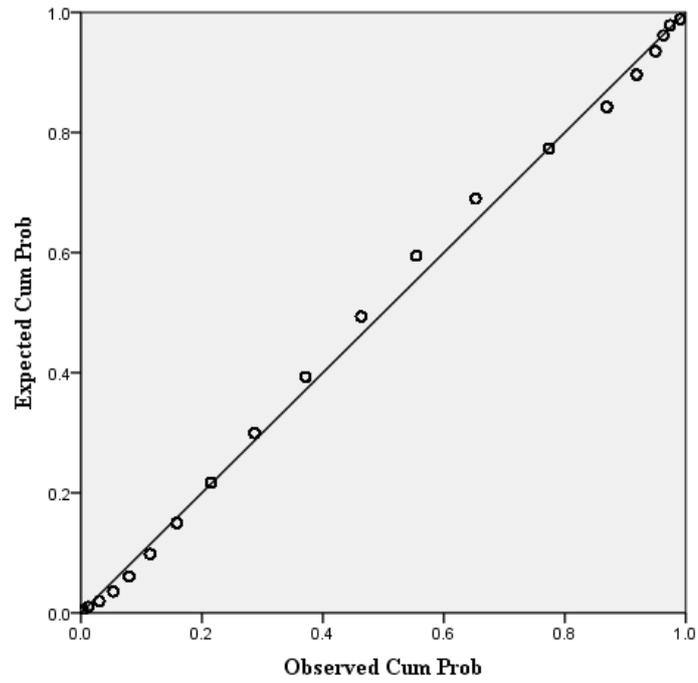


Figure E5. Normal probability plot of cognitive engagement

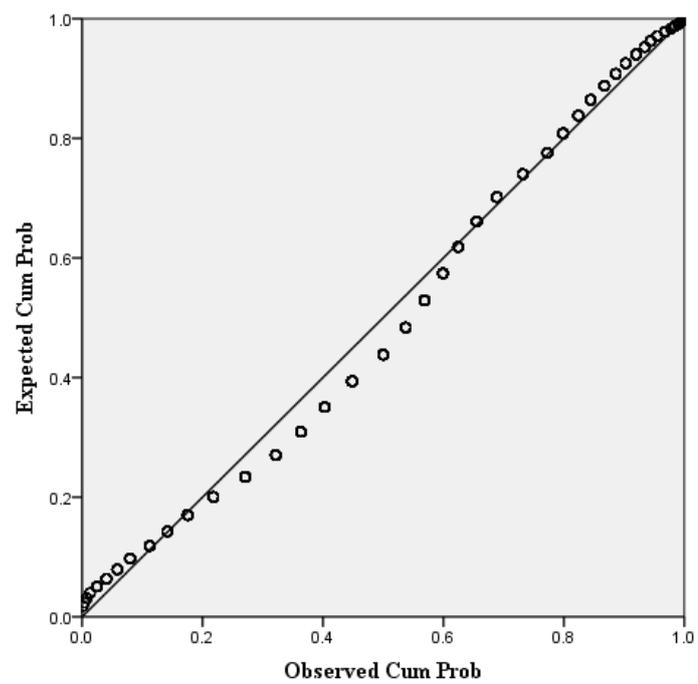


Figure E6. Normal probability plot of organisational politics

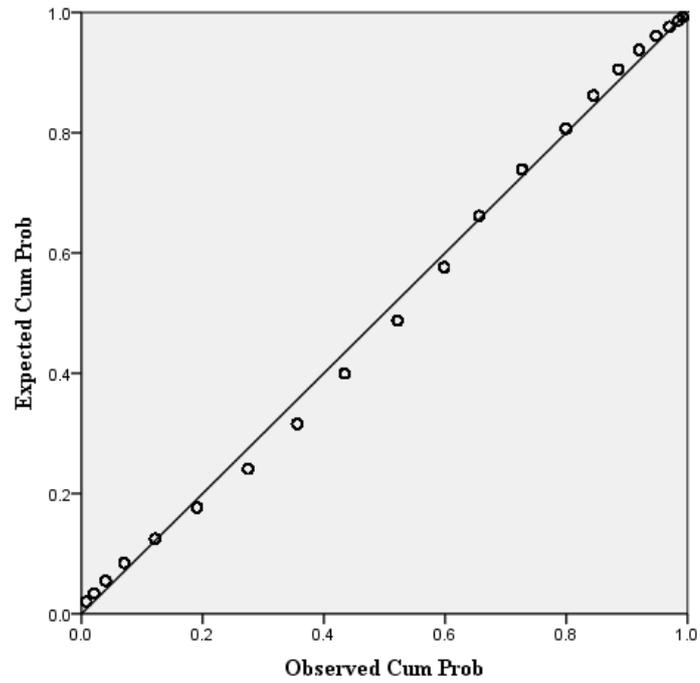


Figure E7. Normal probability plot of organisational politics – go along to get ahead dimension

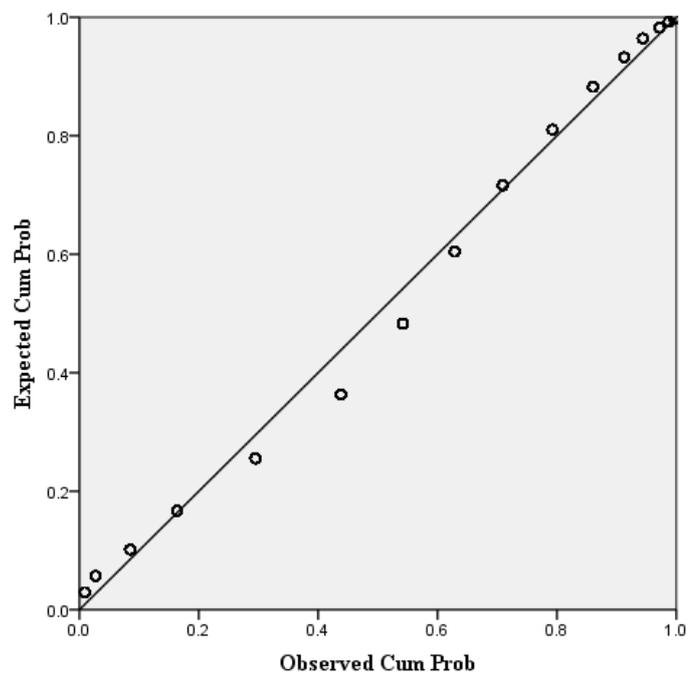


Figure E8. Normal probability plot of organisational politics – general political behaviour dimension

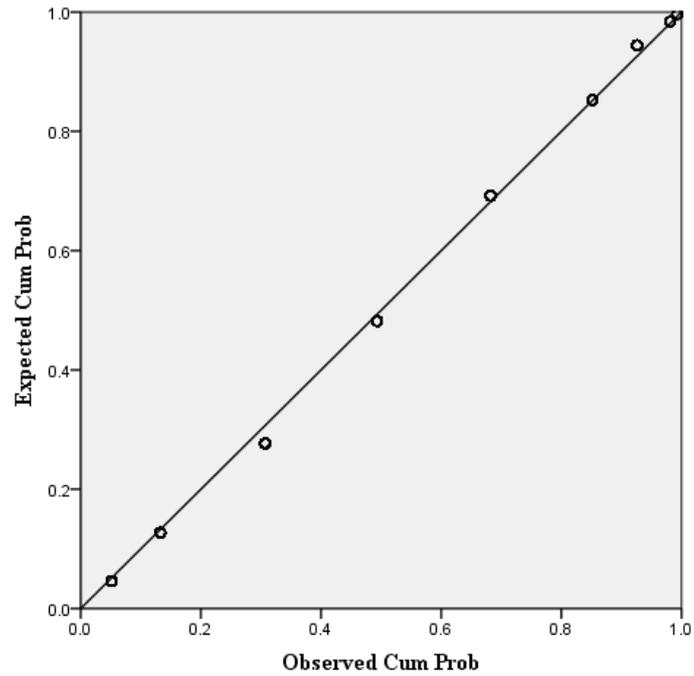


Figure E9. Normal probability plot of organisational politics – pay and promotion dimension

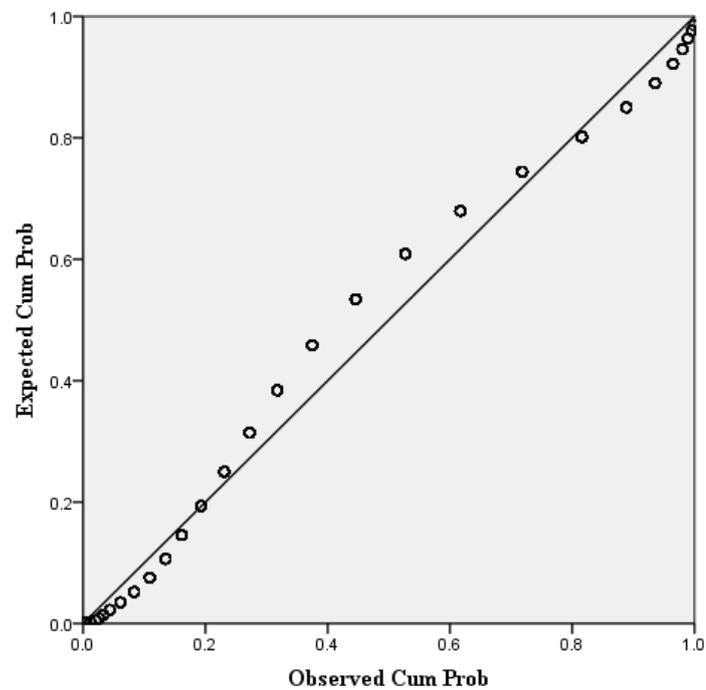


Figure E10. Normal probability plot of procedural justice

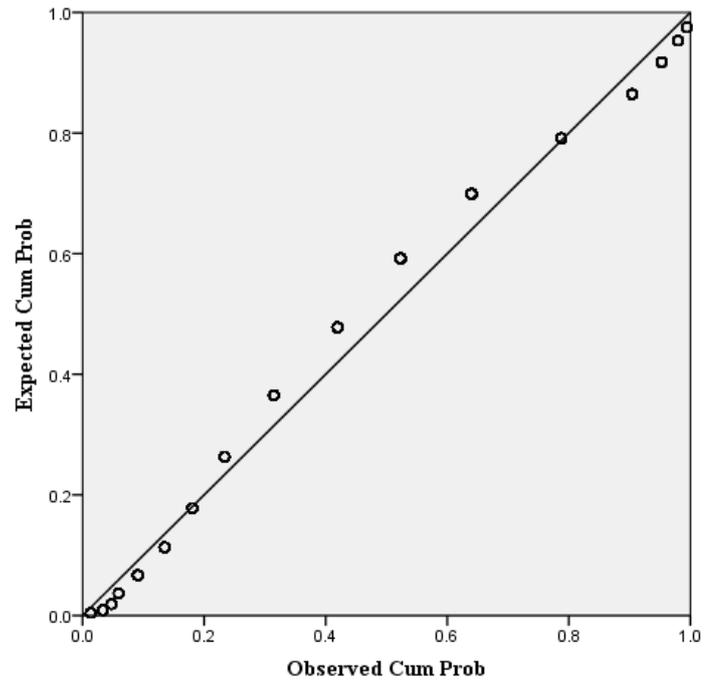


Figure E11. Normal probability plot of distributive justice

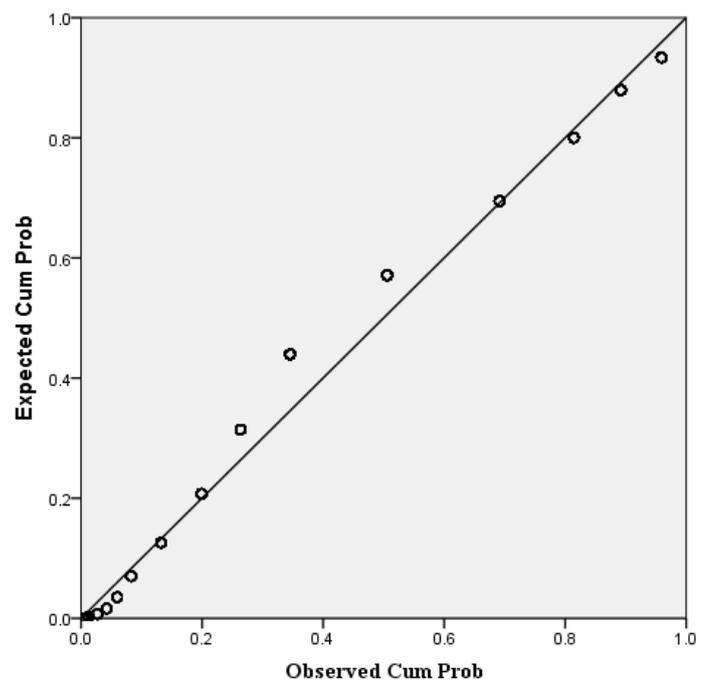


Figure E12. Normal probability plot of interpersonal justice

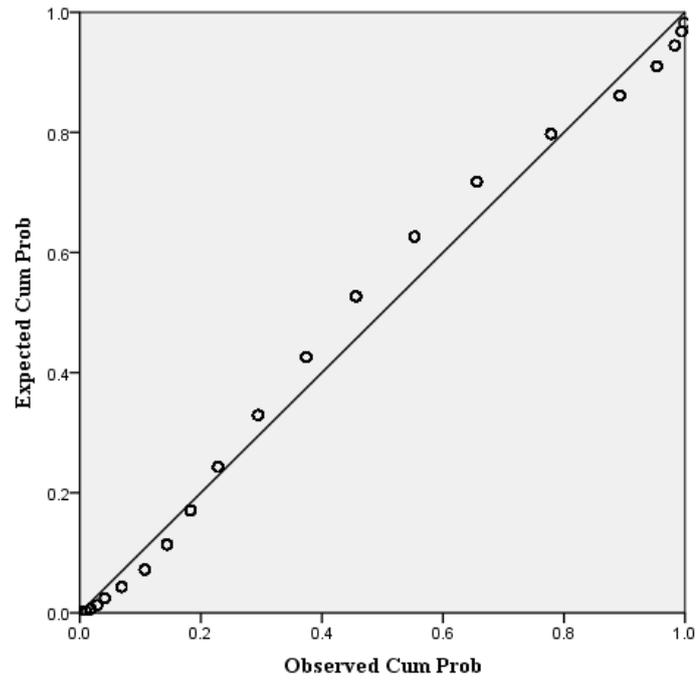


Figure E13. Normal probability plot of informational justice

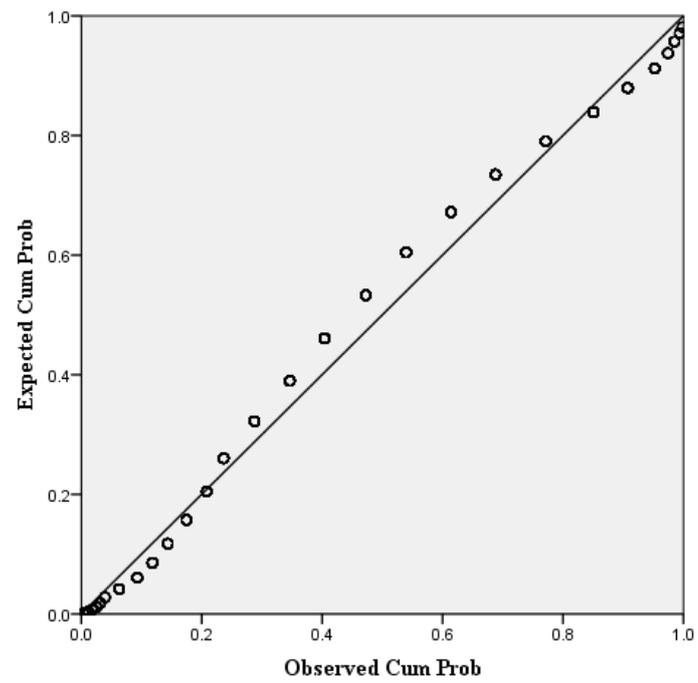


Figure E14. Normal probability plot of HIWPs (power)

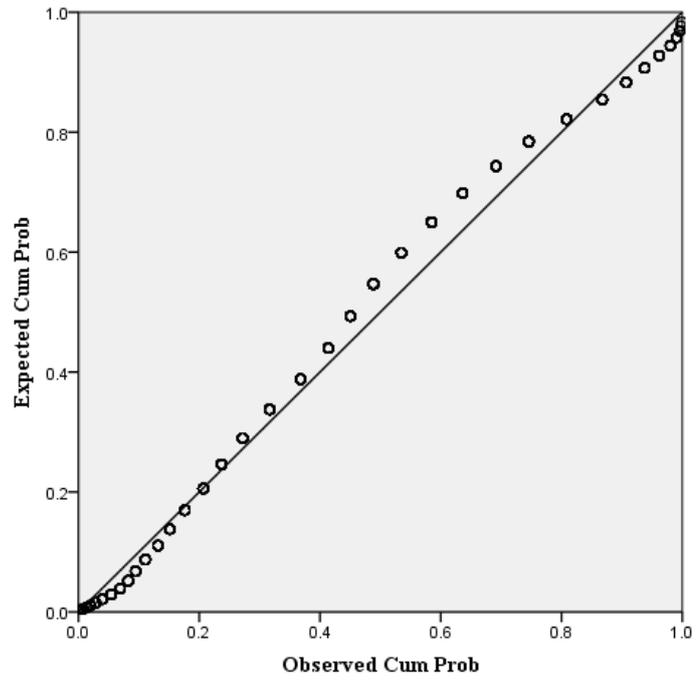


Figure E15. Normal probability plot of HIWPs (information)

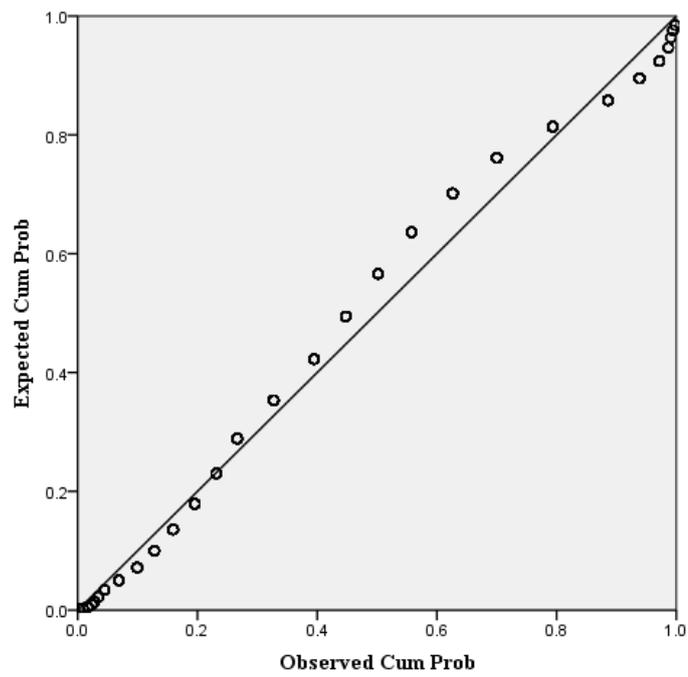


Figure E16. Normal probability plot of HIWPs (reward)

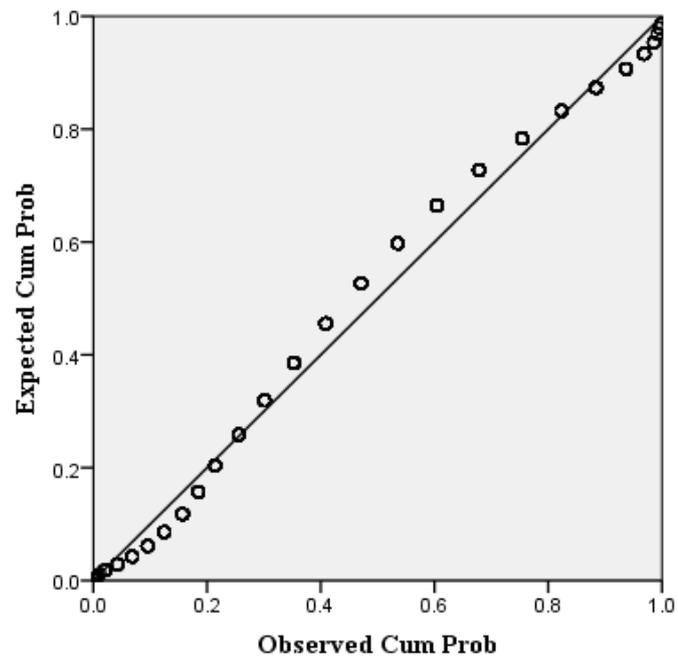


Figure E17. Normal probability plot of HIWPs (knowledge)

Appendix F: Frequency Histograms

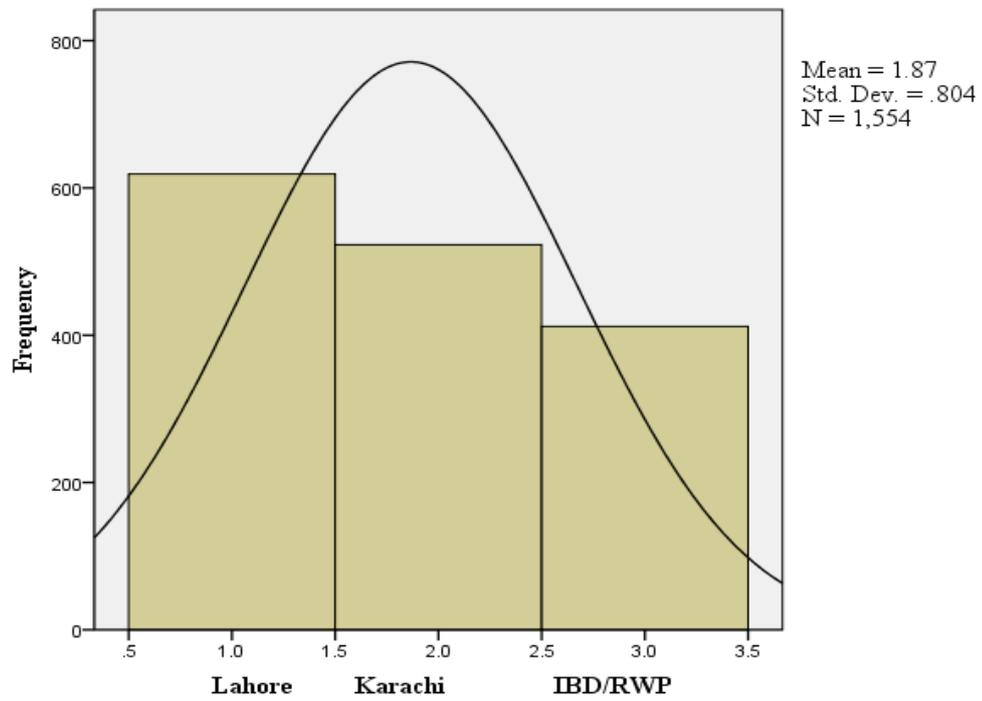


Figure F1. City wise participation in the survey

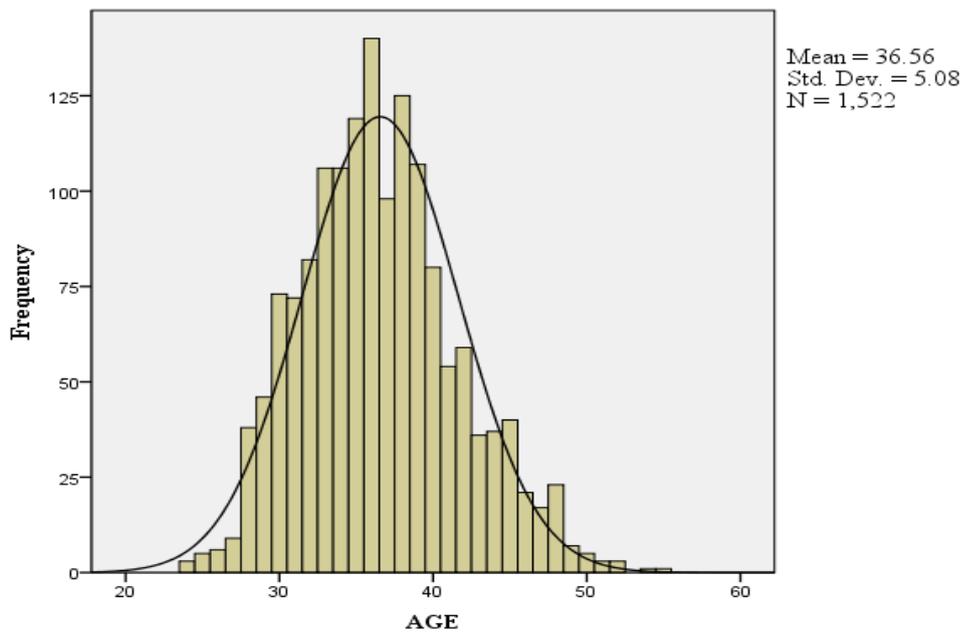


Figure F2. Participants' age

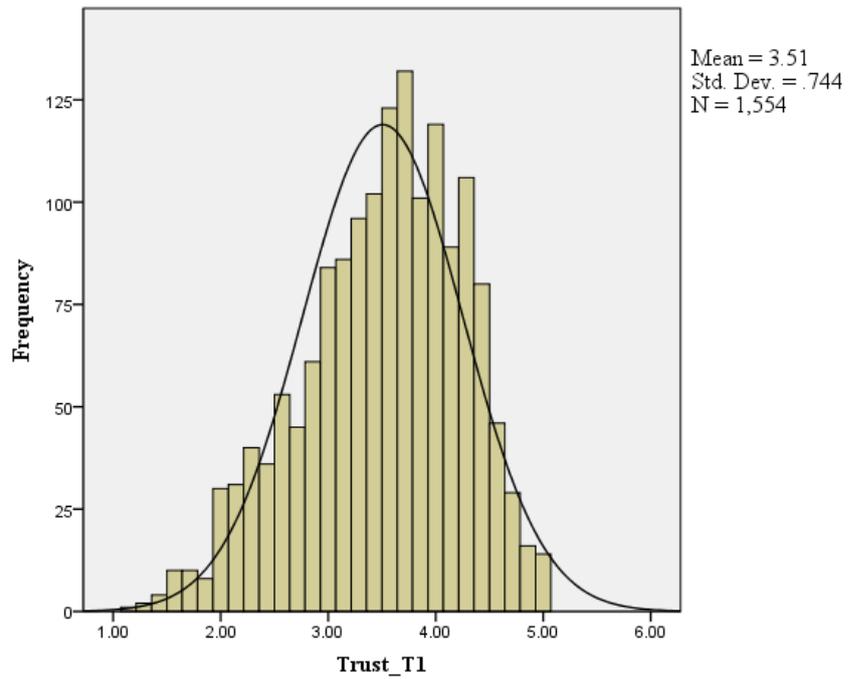


Figure F3. Trust in Employer

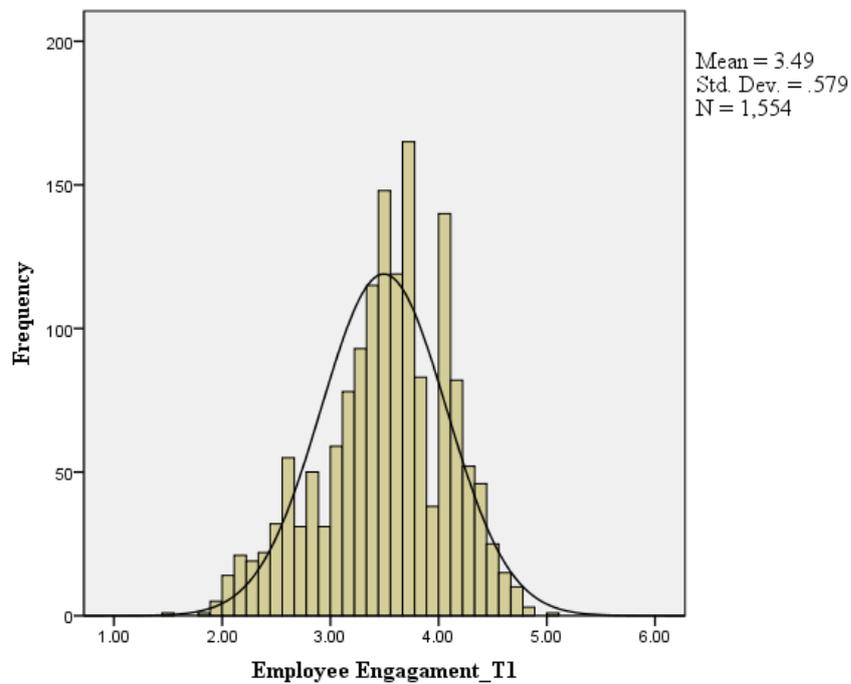


Figure F4. Employee Engagement – mean of all three dimensions

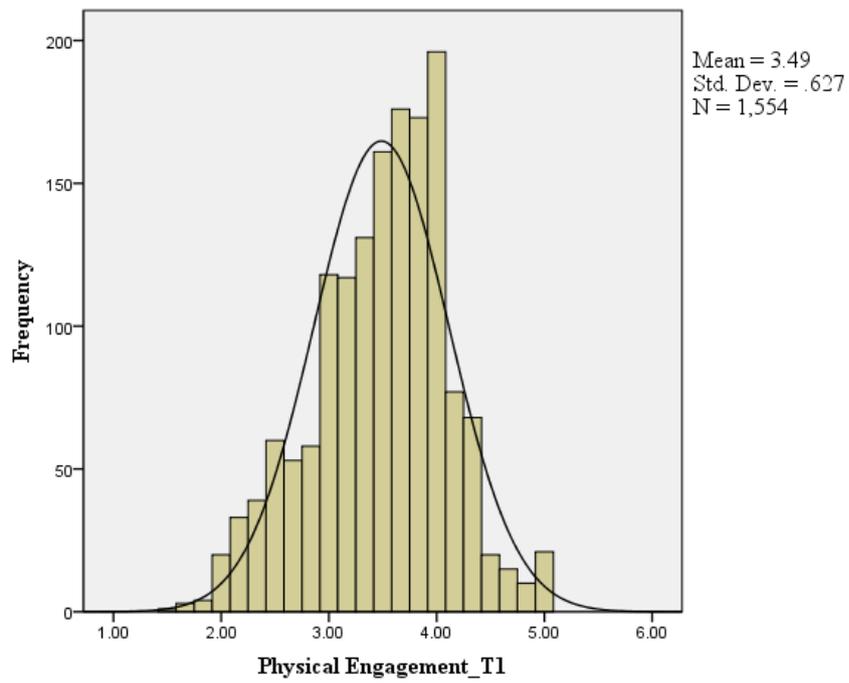


Figure F5. Physical engagement

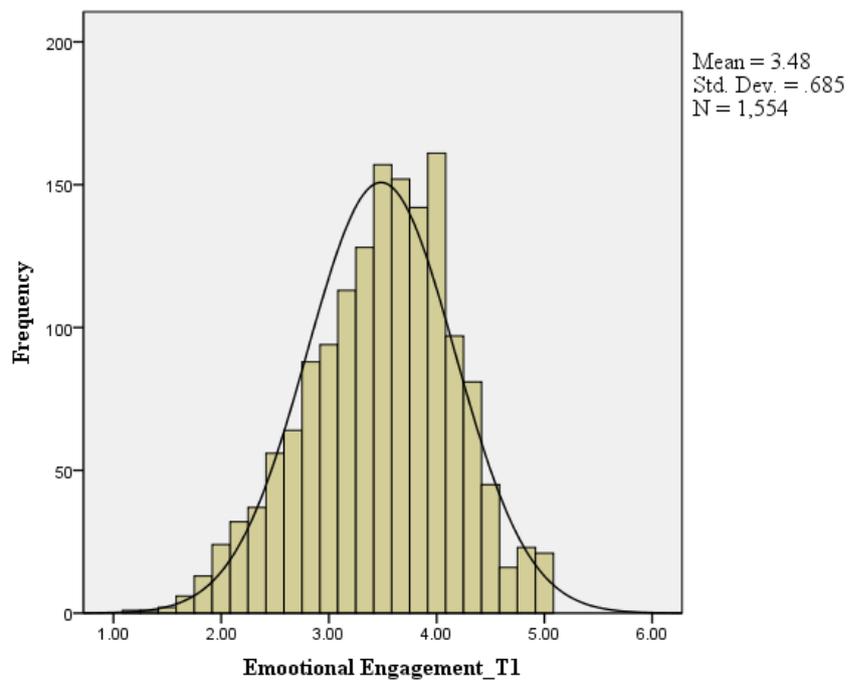


Figure F6. Emotional engagement

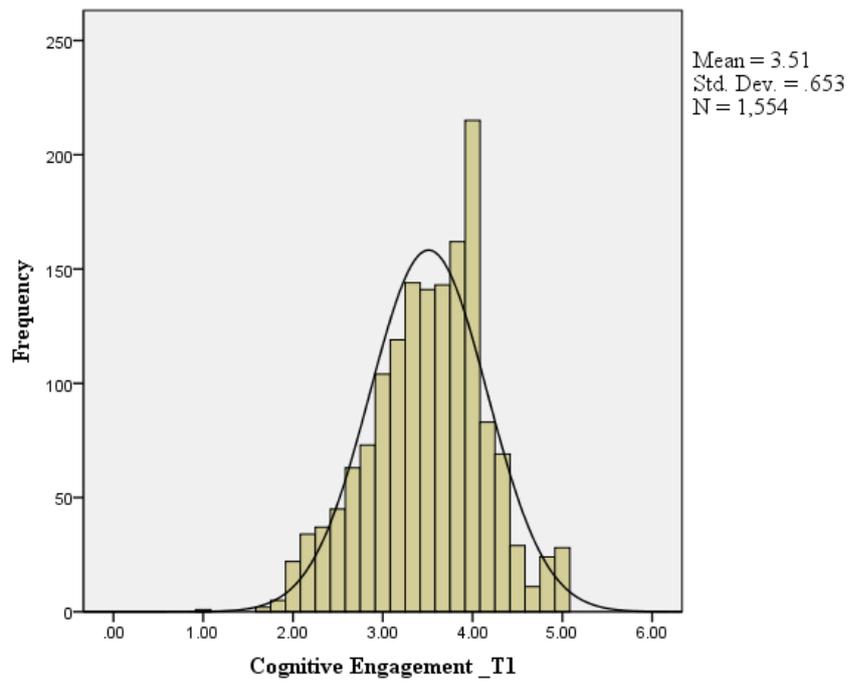


Figure F7. Cognitive engagement

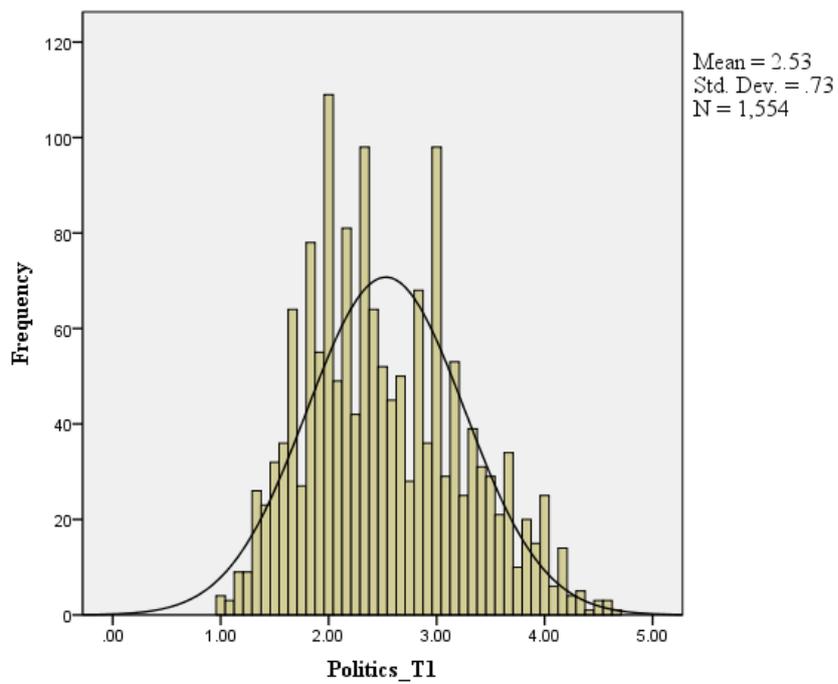


Figure F8. Organisational politics – mean of all three dimensions

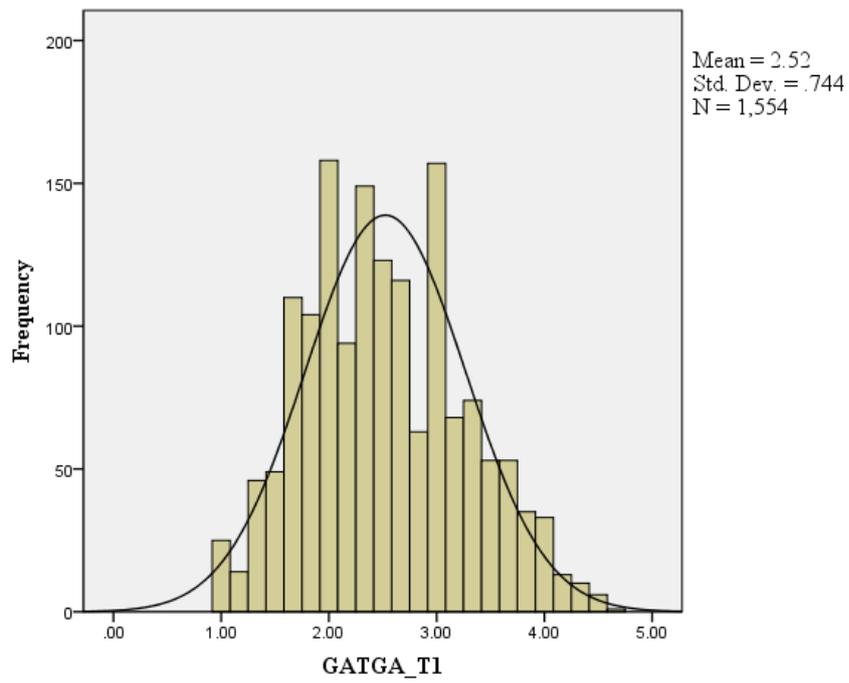


Figure F9. Go along to get ahead (organisational politics)

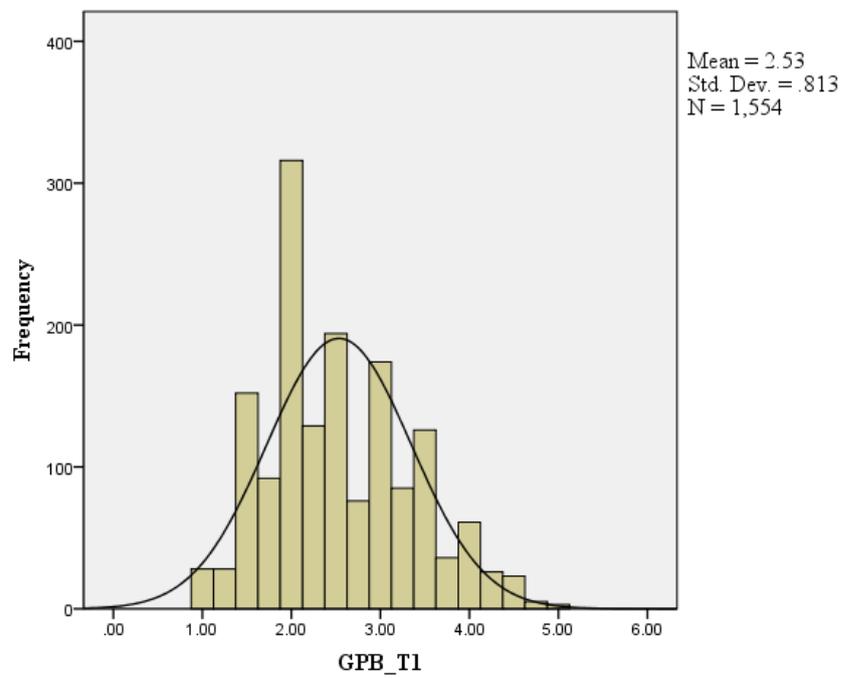


Figure F10. General political behaviour (organisational politics)

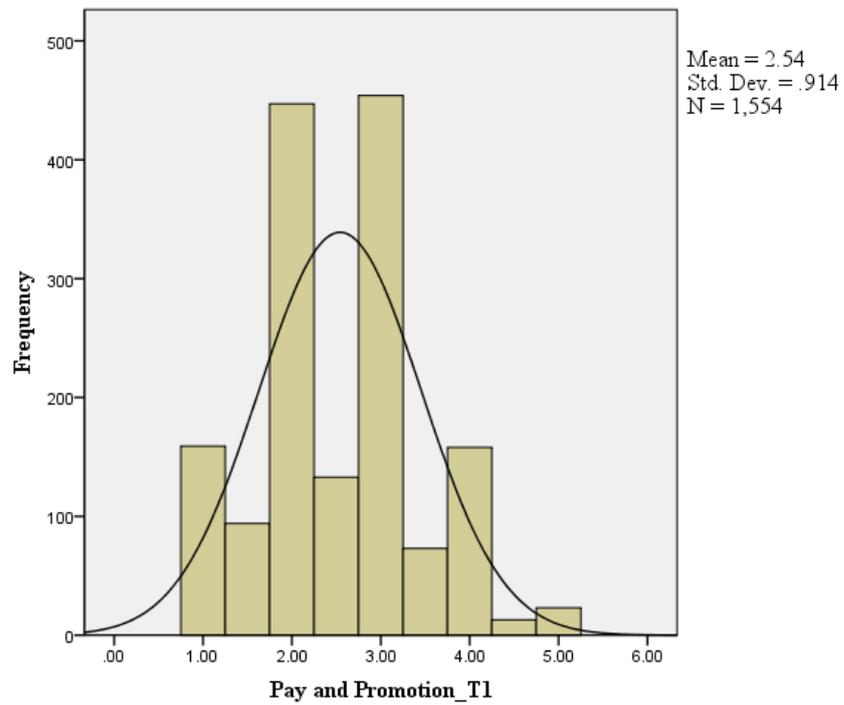


Figure F11. Pay and promotion (organisational politics)

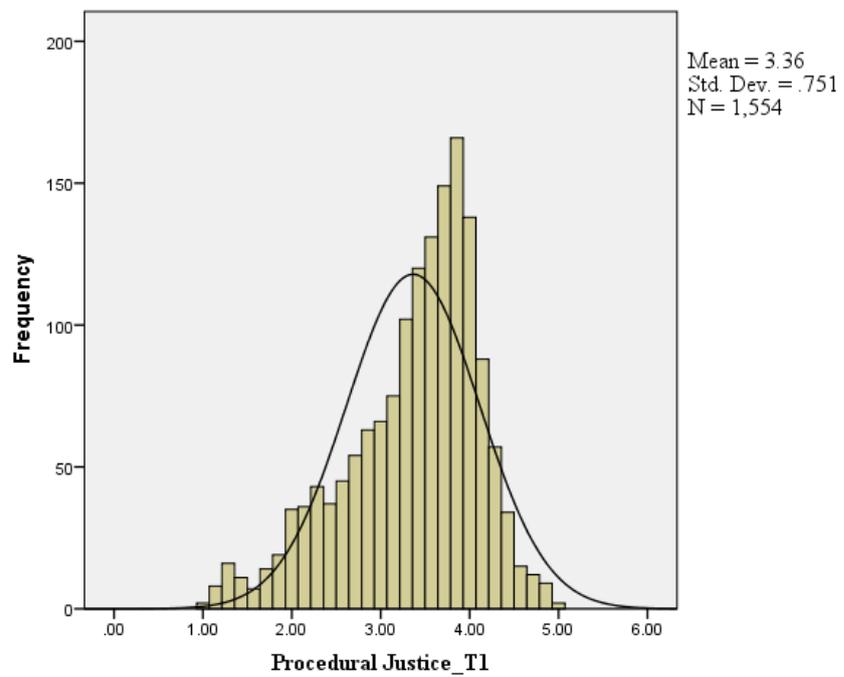


Figure F12. Procedural justice

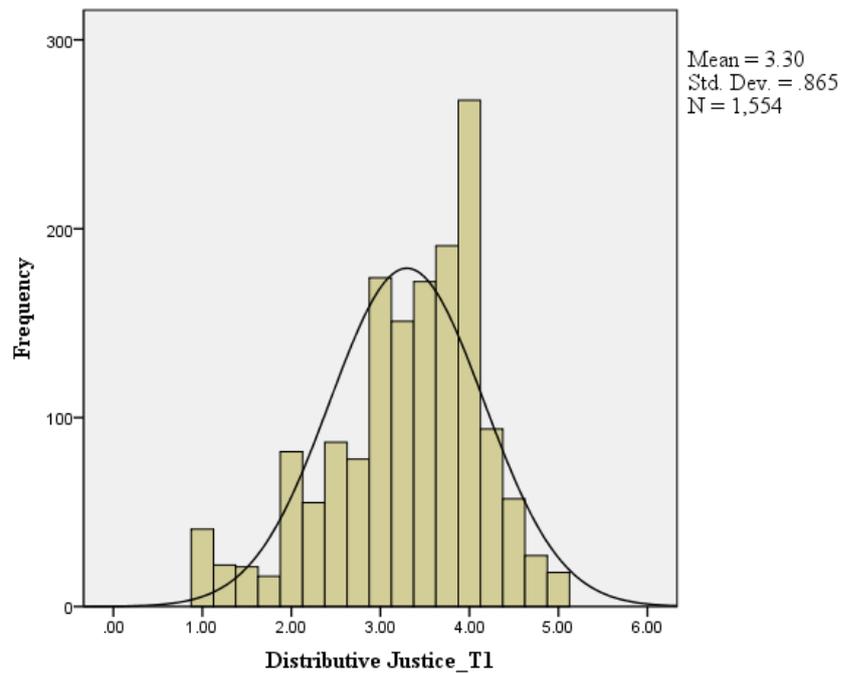


Figure F13. Distributive justice

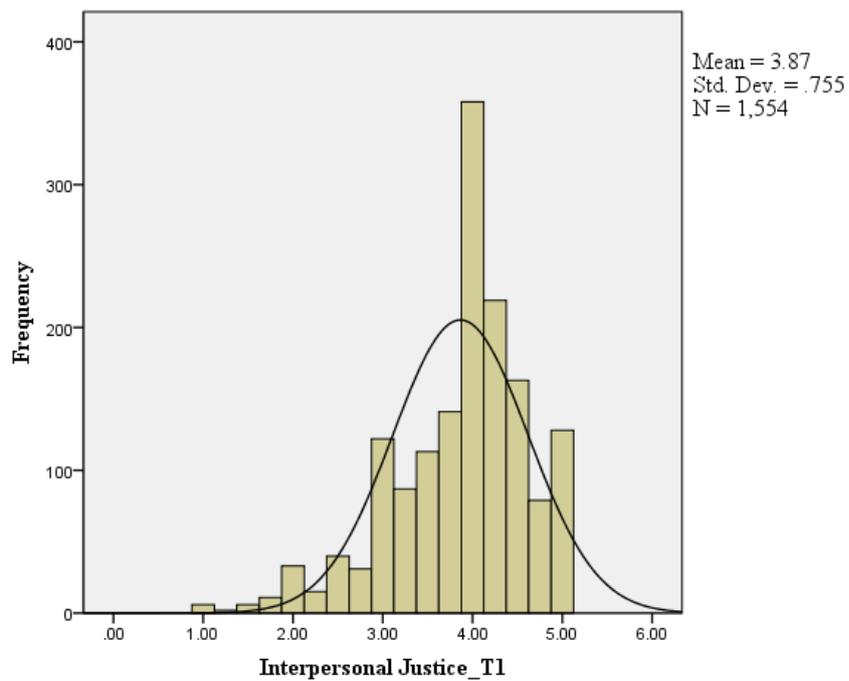


Figure F14. Interpersonal justice

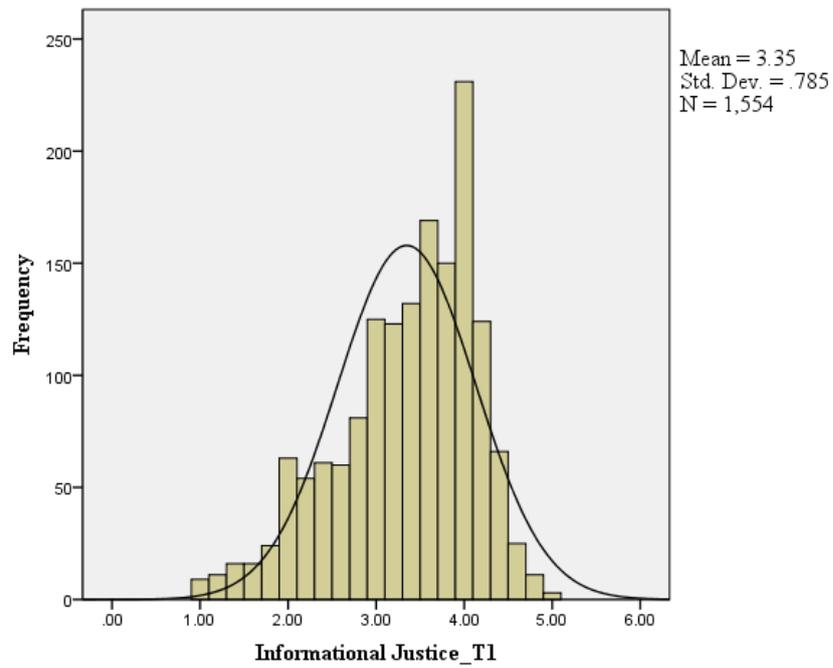


Figure F15. Informational justice

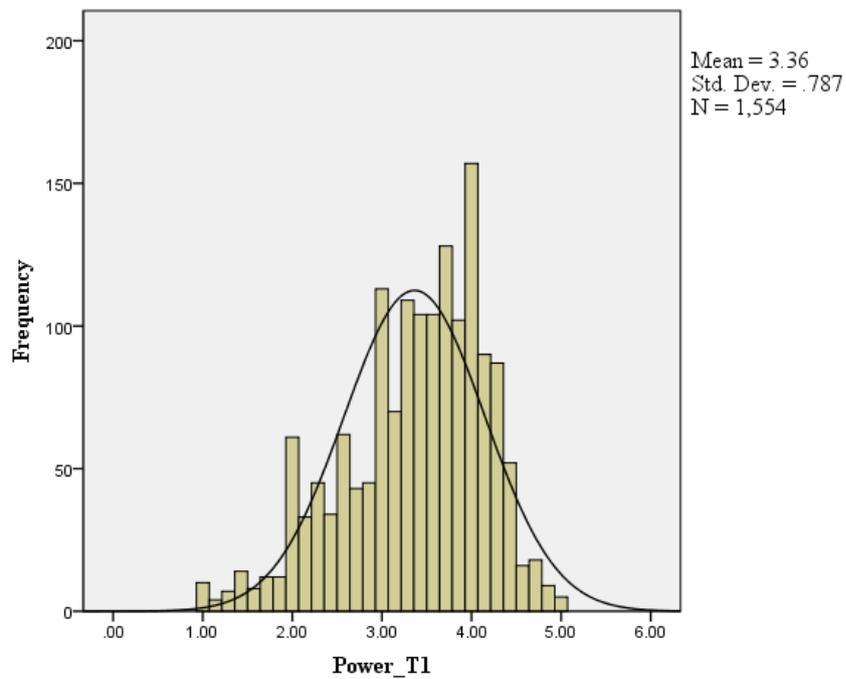


Figure F16. Power (HIWPs)

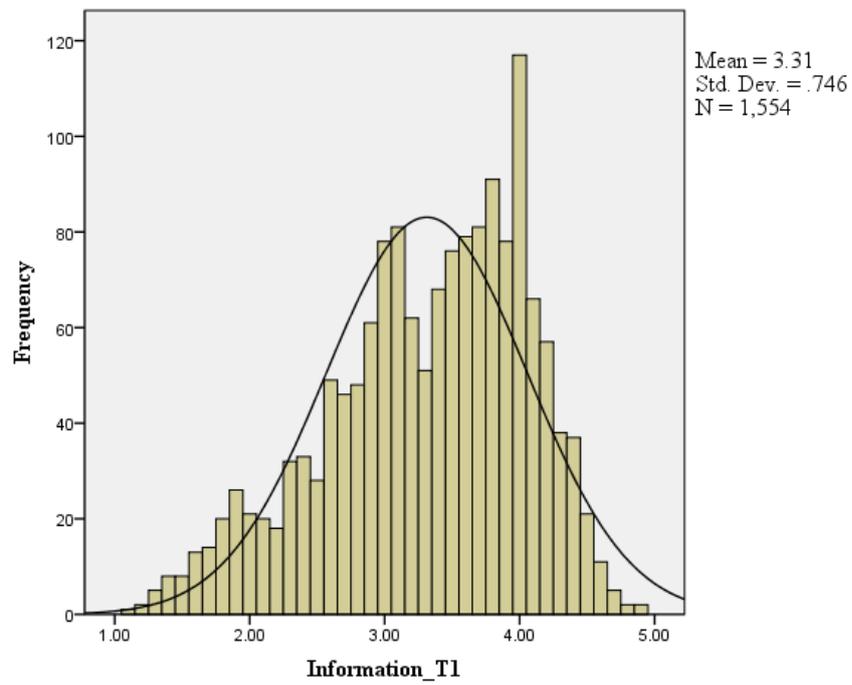


Figure F17. Information (HIWPs)

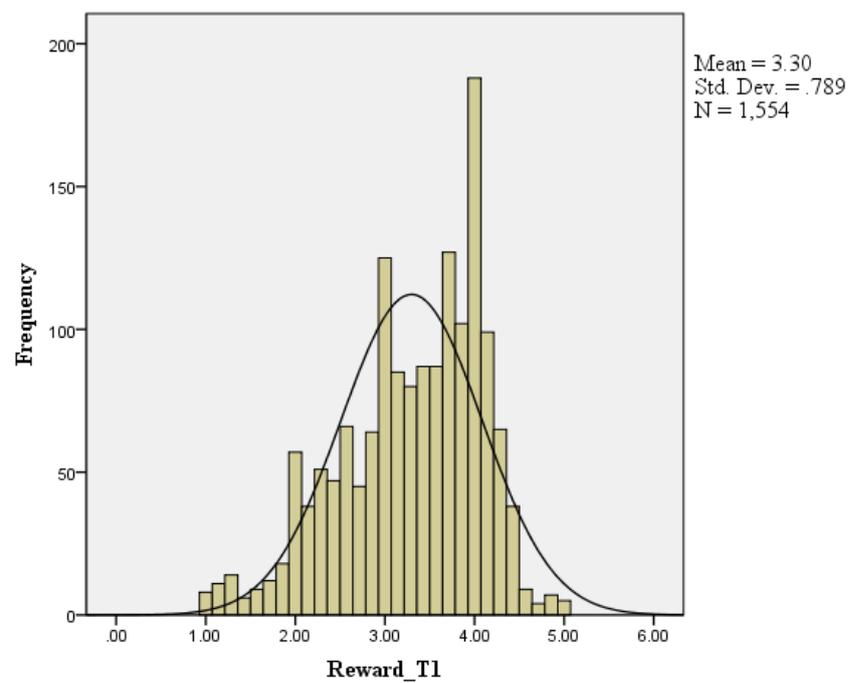


Figure F18. Reward (HIWPs)

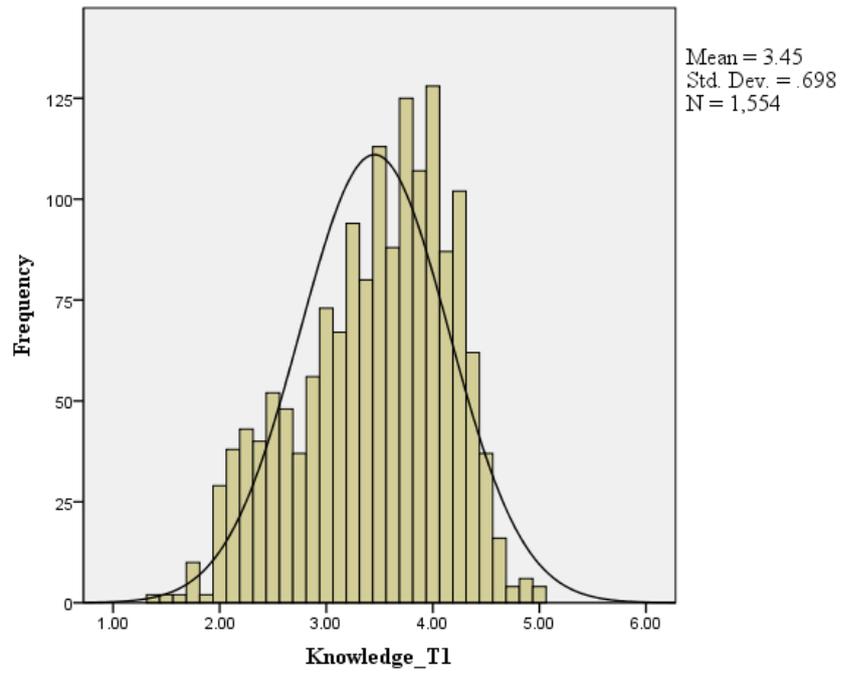


Figure F19. Knowledge (HIWPs)

Appendix G. Assessment of Normality

Table G1
Assessment of Normality of HIWPs Items

Variable	Mean	S.E.	S.D	skew	C.R.	kurtosis	C.R.
KNW_01_t1	3.61	.021	.834	-.247	-3.969	-.065	-.522
KNW_02_t1	3.59	.021	1.01	-.281	-4.524	-.109	-.880
KNW_03_t1	3.50	.022	.987	-.245	-3.937	-.277	-2.231
KNW_04_t1	3.43	.022	.875	-.218	-3.506	-.306	-2.460
KNW_05_t1	3.32	.025	.848	-.319	-5.140	-.402	-3.234
KNW_06_t1	3.33	.026	.831	-.348	-5.603	-.406	-3.269
KNW_07_t1	3.41	.021	.821	-.399	-6.416	-.235	-1.888
KNW_08_t1	3.44	.021	.812	-.352	-5.663	-.196	-1.575
REW_01_t1	3.32	.021	.910	-.301	-4.838	-.232	-1.864
REW_02_t1	3.33	.023	.888	-.460	-7.409	-.151	-1.218
REW_03_t1	3.31	.022	.886	-.430	-6.920	-.183	-1.475
REW_04_t1	3.28	.023	.916	-.463	-7.454	-.204	-1.643
REW_05_t1	3.28	.022	.886	-.487	-7.843	-.246	-1.978
REW_06_t1	3.27	.023	.892	-.437	-7.040	-.287	-2.308
REW_07_t1	3.28	.023	.913	-.392	-6.306	-.258	-2.078
INFO_10_t1	3.29	.025	1.00	-.259	-4.167	-.377	-3.035
INFO_09_t1	3.33	.025	.969	-.313	-5.034	-.336	-2.704
INFO_08_t1	3.36	.025	.973	-.315	-5.070	-.297	-2.389
INFO_01_t1	3.28	.022	.886	-.345	-5.550	-.252	-2.028
INFO_02_t1	3.25	.023	.892	-.373	-5.999	-.292	-2.349
INFO_03_t1	3.27	.025	.986	-.309	-4.979	-.355	-2.858
INFO_04_t1	3.30	.025	.987	-.317	-5.101	-.387	-3.111
INFO_05_t1	3.34	.025	1.00	-.304	-4.886	-.371	-2.986
INFO_06_t1	3.37	.025	.99	-.292	-4.705	-.360	-2.897
INFO_07_t1	3.34	.025	.970	-.329	-5.297	-.299	-2.409
PWR_01_t1	3.32	.022	.849	-.337	-5.423	-.206	-1.655
PWR_02_t1	3.43	.023	.896	-.393	-6.317	-.239	-1.925
PWP_03_t1	3.40	.023	.908	-.390	-6.270	-.194	-1.565
PWR_04_t1	3.31	.023	.896	-.384	-6.178	-.219	-1.763
PWR_05_t1	3.31	.023	.888	-.379	-6.094	-.217	-1.750
PWR_06_t1	3.42	.024	.957	-.369	-5.936	-.201	-1.614
PWR_07_t1	3.35	.023	.893	-.413	-6.645	-.121	-.977
Multivariate						103.023	43.531

Note. KNW = Knowledge; REW = Reward; INFO = Information; PWR = Power; S.D. = Standard Deviation; C.R. = Critical Ratio

Table G2
Assessment of Normality of Organisational Politics Items

Variable	Mean	S.E.	S.D.	skew	C.R.	kurtosis	C.R.
POLT_01_t1	2.44	.023	.921	.226	3.640	-.573	-4.615
POLT_02_t1	2.48	.024	.927	.314	5.050	-.383	-3.079
POLT_03_t1	2.54	.025	.983	.205	3.297	-.611	-4.918
POLT_04_t1	2.52	.025	.983	.195	3.138	-.617	-4.964
POLT_05_t1	2.55	.025	.976	.215	3.455	-.548	-4.408
POLT_06_t1	2.62	.026	1.01	.193	3.112	-.568	-4.572
POLT_07_t1	2.60	.025	.973	.412	6.636	-.408	-3.286
POLT_08_t1	2.55	.025	.986	.405	6.522	-.450	-3.620
POLT_09_t1	2.48	.026	1.02	.395	6.355	-.462	-3.718
POLT_10_t1	2.51	.025	.976	.353	5.682	-.405	-3.256
POLT_11_t1	2.54	.024	.952	.186	2.987	-.410	-3.299
POLT_12_t1	2.55	.025	.976	.238	3.838	-.384	-3.089
Multivariate						31.138	33.483

Note. POLT = Politics; S.E. = Standard Error; S.D. = Standard Deviation; C.R. = Critical Ratio

Table G3
Assessment of Normality of Items

Variable	Mean	S.E.	S.D.	skew	C.R.	kurtosis	C.R.
TST_01_t1	3.33	.027	1.06	-.174	-2.795	-.808	-6.500
TST_02_t1	3.36	.023	.903	-.099	-1.595	-.377	-3.036
TST_03_t1	3.60	.023	.889	-.410	-6.606	-.114	-.914
TST_04_t1	3.72	.024	.956	-.458	-7.377	-.264	-2.123
TST_05_t1	3.45	.025	.982	-.187	-3.011	-.643	-5.171
TST_07_t1	3.60	.027	1.05	-.472	-7.595	-.392	-3.153
Multivariate						4.402	8.855

Note. TST = Trust; S.E. = Standard error; S.D. = Standard Deviation; C.R. = Critical Ratio

Table G4
Assessment of Normality of Organisational Justice Items

Variable	Mean	S.E.	S.D.	skew	C.R.	kurtosis	C.R.
INFJ_01_t1	3.46	.023	.890	-.403	-6.482	-.217	-1.749
INFJ_02_t1	3.21	.023	.905	-.395	-6.350	-.276	-2.218
INFJ_03_t1	3.23	.025	1.00	-.316	-5.083	-.309	-2.487
INFJ_04_t1	3.38	.025	.976	-.394	-6.339	-.229	-1.841
INFJ_05_t1	3.45	.025	.994	-.329	-5.289	-.294	-2.368
INPJ_01_t1	4.02	.021	.818	-.892	-14.361	1.123	9.040
INPJ_02_t1	3.94	.021	.813	-.743	-11.953	.791	6.368
INPJ_03_t1	3.89	.022	.887	-.700	-11.273	.394	3.170
INPJ_04_t1	3.61	.029	1.14	-.652	-10.498	-.299	-2.408
DSTJ_01_t1	3.29	.023	.916	-.557	-8.962	-.075	-.603
DSTJ_02_t1	3.28	.023	.923	-.567	-9.125	-.067	-.541
DSTJ_03_t1	3.31	.025	.980	-.502	-8.073	-.125	-1.003
DSTJ_04_t1	3.31	.025	.977	-.447	-7.193	-.134	-1.082
PROJ_01_t1	3.45	.022	.861	-.340	-5.480	-.126	-1.011
PROJ_02_t1	3.09	.024	.953	-.337	-5.420	-.490	-3.944
PROJ_03_t1	3.30	.023	.924	-.304	-4.885	-.327	-2.635
PROJ_04_t1	3.36	.025	.979	-.426	-6.848	-.127	-1.018
PROJ_05_t1	3.40	.024	.954	-.461	-7.416	-.140	-1.125
PROJ_06_t1	3.43	.023	.919	-.456	-7.344	-.033	-.262
PROJ_07_t1	3.52	.024	.962	-.375	-6.029	-.220	-1.770
Multivariate						34.354	22.826

Note. INFJ = Informational Justice; INPJ = Interpersonal Justice; S.E. = Standard Error; S.D. = Standard Deviation; C.R. = Critical Ratio

Table G5
Assessment of Normality of Employee Engagement Items

Variable	Mean	S.E.	S.D.	skew	C.R.	kurtosis	C.R.
COGE_01_t1	3.49	.021	.824	-.141	-2.273	-.277	-2.226
COGE_02_t1	3.53	.020	.783	-.160	-2.574	-.153	-1.231
COGE_03_t1	3.56	.021	.825	-.180	-2.902	-.203	-1.636
COGE_04_t1	3.45	.023	.890	-.293	-4.713	-.154	-1.236
COGE_05_t1	3.51	.020	.786	-.217	-3.498	-.211	-1.701
COGE_06_t1	3.53	.020	.801	-.268	-4.307	-.057	-.462
EMOE_01_t1	3.46	.022	.857	-.226	-3.636	-.062	-.502
EMOE_02_t1	3.49	.020	.807	-.165	-2.654	-.023	-.189
EMOE_03_t1	3.57	.022	.860	-.179	-2.884	-.211	-1.701
EMOE_04_t1	3.38	.025	.970	-.408	-6.564	-.068	-.551
EMOE_05_t1	3.51	.020	.778	-.266	-4.276	-.098	-.792
EMOE_06_t1	3.50	.023	.899	-.308	-4.957	-.083	-.671
PHYE_01_t1	3.47	.018	.725	-.299	-4.813	.005	.043
PHYE_02_t1	3.48	.019	.737	-.338	-5.436	.031	.250
PHYE_03_t1	3.50	.020	.797	-.220	-3.544	-.002	-.016
PHYE_04_t1	3.48	.021	.829	-.370	-5.950	.121	.977
PHYE_05_t1	3.49	.022	.851	-.405	-6.523	.034	.278
PHYE_06_t1	3.51	.020	.807	-.229	-3.680	-.260	-2.092
Multivariate						37.547	27.581

Note. COGE = Cognitive Engagement; EMOE = Emotional Engagement; PHYE = Physical Engagement; S.E. = Standard Error; S.D. = Standard Deviation; C.R. Critical Ratio