

**OCB: A FUNCTION OF HIGH-PERFORMANCE HR
PRACTICES, PSYCHOLOGICAL CLIMATE &
WORK ENGAGEMENT**

Ph.D. THESIS

by

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**DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
ROORKEE-247 667, INDIA
JUNE, 2014**

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PRACTICES, PSYCHOLOGICAL CLIMATE &
WORK ENGAGEMENT**

A THESIS

*Submitted in partial fulfilment of the
requirements for the award of the degree
of*

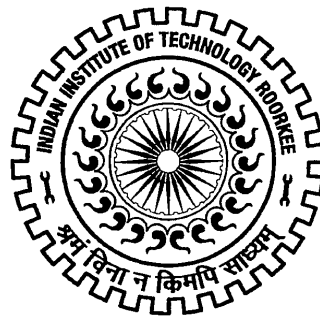
DOCTOR OF PHILOSOPHY

in

ORGANIZATIONAL BEHAVIOUR

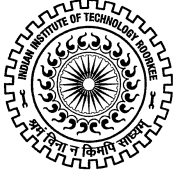
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JUNE, 2014**

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CANDIDATE'S DECLARATION

I hereby certify that the work which is being presented in the thesis entitled “**OCB: A FUNCTION OF HIGH-PERFORMANCE HR PRACTICES, PSYCHOLOGICAL CLIMATE & WORK ENGAGEMENT**” in partial fulfilment of the requirements for the award of the degree of Doctor of Philosophy and submitted in the **Department of Humanities and Social Sciences, Indian Institute of Technology Roorkee, Roorkee** is an authentic record of my own work carried out during a period from December, 2010 to June, 2014 under the supervision of Dr. Renu Rastogi, Professor and Dr. Pooja Garg, Assistant Professor, Department of Humanities and Social Sciences, Indian Institute of Technology Roorkee, Roorkee.

The matter presented in this thesis has not been submitted by me for the award of any other degree of this or any other Institute.

(AAKANKSHA KATARIA)

This is to certify that the above statement made by the candidate is correct to the best of our knowledge.

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ACKNOWLEDGEMENT

It gives me immense pleasure in expressing my gratitude to all those people who have supported me and contributed in making this thesis possible. First and Foremost, I must acknowledge and thank The Almighty for showering his blessings on me throughout this period. I could have never accomplished the work without the faith I have in the Almighty.

I express my profound sense of reverence to my supervisors Prof. (Mrs.) Renu Rastogi and Dr. Pooja Garg for their constant guidance, firm advice, support, and untiring help during the course of my PhD. Their supervision helped me in all the time of writing this thesis. Whenever I faced any problem on academic front or at the personal level, their counseling and words of encouragement reinforced my thinking and helped me to work my potential. This thesis could not have completed without their insights and genuine interest.

Also, I am grateful to Student Research Committee (SRC) members: Prof. D.K. Nauriyal (Chairman), Dr. A.J. Mishra (Internal Expert), and Prof. J.P. Singh (External Expert) for their thoughtful comments, support, and encouragement.

I would also like to thank University Grant Commission, Government of India for providing me financial assistance in terms of research fellowship which has made this research possible. I also acknowledge the support of the Department of Humanities and Social Sciences, Indian Institute of Technology, Roorkee and its staff for providing the indispensable facilities which made my journey very smooth. Sincere thanks are also given to the study participants who provided the required data to carry out this research.

I thank all my friends for the great time I have always had with them. Apart from the fun, some of my friends have also been a great source of learning and inspiration. Thanks a lot to one and all and special thanks to Sonal Jain, Pallavi Verma, and Pinki Sharma. I will always cherish the moments I have shared with all my friends.

I want to express my deepest love and thanks to my loving husband, Harshit, for being a great friend and a support in the voyage of this research work. His patience and belief in me has been the real reason I was able to complete this marathon of doctoral work. He has been an incredible source of motivation and unending encouragement.

With sincere gratitude, I would like to thank my parents, my brother & sister, and my in-laws for their unfailing support and for boosting my morale throughout the course of research. Finally, I extend my thanks to all who helped me to realize this dream.

AAKANKSHA KATARIA

ABSTRACT

With the advent of positive psychology movement in almost every sphere of human life including organizations advocating for the investment of employees' focused efforts and positive energies towards organizational goals. There has been a tremendous encouragement to human creative capabilities and optimism. Keeping this in view, the present study reviews the organizational paradigms of high-performance HR practices, psychological climate, and work engagement and attempts to relate these factors with organizational citizenship behaviors (OCBs). The present study tests the relationship of key components of high-performance HR practices (internal career opportunities, extensive training, employment security, sensitive selection, incentive compensation, and participation and communication), psychological climate (supportive management, role-clarity, recognition, job-challenge, meaningfulness, and self-expression), and work engagement (vigor, dedication, and absorption) with OCBs in an Indian sample of working population of IT industry. The study was designed to generate and test a hypothesized model colligating between high-performance HR practices, psychological climate, work engagement and the organizational citizenship behaviours. The model proposes psychological climate and work engagement as mediators in the relationship between high-performance HR practices and OCB. In this endeavor, the mediating effect of psychological climate on the equation of high-performance HR practices and work engagement was tested. And, the mediating effect of work engagement was tested on the equation of high-performance HR practices, psychological climate and OCBs. The study provides an insight into the underlying process through which high-performance HR practices have impact on OCBs.

For the purpose of the study, primary responses were collected from 357 IT employees across the national capital region (NCR), India. Due to vast population size, convenience sampling was preferred for data collection. Data analysis was performed by using SPSS[®]17 and AMOS[®]21. Data was checked for missing values, normality, linearity, reliability, non-multicollinearity and homoscedasticity. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were employed respectively to obtain the factor structure and fitness of the obtained factor pattern on the focused sample. Study hypotheses were tested using multiple hierarchical regression technique and the structural equation modeling approach (SEM) was used to examine the research model. Two

alternative structural models were compared to the research model using Chi square difference test.

Conclusively, research findings suggest that the different constituents of high-performance HR practices, psychological climate, and work engagement augment OCBs in IT organizations. Additionally, findings demonstrated the significance of employees' perceptions of psychological climate through which high-performance HR practices can boost employees' work engagement which in turn has come out to be the principal mechanism through which high-performance HR practices and psychological climate have impact on OCBs. High-performance HR practices have also been found to influence work engagement directly which furthers the employees' tendency to display OCBs.

The result of the study would help the IT organizations to understand the psychological aspects of the high-performance HR practices and positive work climate factors which help in building a high-quality employment relationship with employees. This would facilitate the organizations to align their HR strategy with business strategy and in eliciting employees' positive perceptions of their working environments along with integrated HR practices. It would further help in creating conditions conducive for higher work engagement of employees and their increased tendency to exhibit OCBs. The results have established a platform where HR managers can be motivated to open up new avenues to employees to be psychologically involved in work roles and to feel highly motivated to bring their good spirits at the workplace in order to benefit the organization at large.

Key words: High-performance HR Practices, Psychological Climate, Work Engagement, OCBs, SEM, IT Organizations.

CONTENTS

TITLE	PAGE NO.
<i>Candidate's declaration</i>	
<i>Acknowledgment</i>	ii
<i>Abstract</i>	iii
<i>Contents</i>	v
<i>List of Tables</i>	viii
<i>List of Figures</i>	ix
<i>Abbreviations</i>	x
Chapter-I INTRODUCTION	1-28
1.1 Research Gaps	9
1.2 Conceptual Considerations	11
1.2.1 High-Performance HR Practices	11
1.2.2 Psychological Climate	15
1.2.3 Work Engagement	19
1.2.4 Organizational Citizenship Behavior (OCB)	23
Chapter-II REVIEW OF LITERATURE	29-82
2.1 Organizational Citizenship Behavior (OCB)	29
2.2 High-Performance HR Practices	39
2.2.1 High-performance HR Practices and OCB	52
2.3 Psychological Climate	53
2.3.1 High-Performance HR Practices and OCB- Role of Psychological Climate	63
2.3.1.1 High-Performance HR Practices and Psychological Climate	64
2.3.1.2 Psychological Climate and OCB	65
2.4 Work Engagement	66
2.4.1 High-performance HR Practices, Psychological Climate, and OCB - Role of Work Engagement	71
2.4.1.1 High-Performance HR Practices and Work Engagement	71

	2.4.1.2 Psychological Climate and Work Engagement	78
	2.4.1.3 Work Engagement and OCB	79
Chapter-III	RESEARCH METHODOLOGY	82-93
3.1	Research Objectives	83
3.2	Research Hypotheses	84
3.3	Sample	85
3.4	Procedure and Data Collection	87
	3.4.1 Personal Information Section	88
	3.4.2 High-Performance HR practices	88
	3.4.3 Psychological Climate	89
	3.4.4 Work Engagement	90
	3.4.5 Organizational Citizenship Behavior	91
3.5	Control Variables	92
3.6	Data Analysis	92
Chapter-IV	RESULTS & DISCUSSION	94-143
4.1	Preliminary Screening of Data	94
4.2	Factor Structure of the Instruments	95
	4.2.1 Exploratory Factor Analysis (EFA) of the High- Performance HRPractices Scale	96
	4.2.2 Confirmatory Factor Analysis (CFA) of the High- Performance HRPractices Scale	98
	4.2.3 Exploratory Factor Analysis (EFA) of the Psychological Climate Scale	100
	4.2.4 Confirmatory Factor Analysis (CFA) of the Psychological Climate Scale	100
	4.2.5 Exploratory Factor Analysis (EFA) of the Work Engagement Scale	103
	4.2.6 Confirmatory Factor Analysis (CFA) of the Work Engagement Scale	104
	4.2.7 Exploratory Factor Analysis (EFA) of the Organizational Citizenship Behavior (OCB) Scale	106
	4.2.8 Confirmatory Factor Analysis (CFA) of the Organizational Citizenship Behavior (OCB) Scale	106
4.3	Test of Substantive Relationship	109
4.4	Common Method Bias	109

4.5	Hierarchical Regression Analysis	111
4.5.1	The Role of High-Performance HR Practices on OCB	111
4.5.2	The Role of Psychological Climate on OCB	115
4.5.3	The Role of Work Engagement on OCB	116
4.6	Testing the Structural Model	119
4.6.1	Measurement models	119
4.6.2	Structural Models	120
4.7	Discussion on Findings	125
4.8	High-Performance HR Practices and OCBs	125
4.9	Psychological Climate and OCBs	129
4.10	Work Engagement and OCBs	133
4.11	High-Performance HR Practices, Psychological Climate, Work engagement, and OCBs	134
Chapter- V	CONCLUSION	144-149
5.1	Conclusion	144
5.2	Contributions of the Study	145
5.2.1	Theoretical Contributions	145
5.2.2	Practical Contributions	147
5.3	Limitations and Future Scope of Research	148
	REFERENCES	150-177
ANNEXURE 1	Instrument for Data Collection	178-183

LIST OF TABLES

TABLE NO.	TITLE	PAGE NO.
2.1	Summary of Previous Studies on High-Performance HR Practices	44
2.2	Summary of Previous Studies on Psychological Climate	58
2.3	Summary of Previous Studies on Work Engagement and Employees' Behavioral Outcomes	72
3.1	Demographic Characteristics of the Participants	88
4.1	Normality, Reliability and Non-Multicollinearity Coefficients	95
4.2	Variables Included in Each Factor and Factor Loadings.	97
4.3	Confirmatory Factor Analysis of Alternative Models	98
4.4	Variables Included in Each factor and Factor Loadings.	101
4.5	Confirmatory Factor Analysis of Alternative Models	103
4.6	Variables included in each factor and factor loadings	104
4.7	Confirmatory Factor Analysis of Alternative Models	104
4.8	Variables Included in Each Factor and Factor Loadings	107
4.9	Confirmatory Factor Analysis of Alternative Models	107
4.10	Descriptive Statistics of Study Variables	110
4.11	Intercorrelations among Study Constructs and their Reliability	112
4.12	Results of Hierarchical Regression Analysis (PV High-performance HR Practices Factors, DV Organizational Citizenship Behaviour)	113
4.13	Results of Hierarchical Regression Analysis (PV Psychological Climate, DV Organizational Citizenship Behaviour)	117
4.14	Results of Hierarchical Regression Analysis (PV work engagement, DV Organizational Citizenship Behaviour)	118
4.15	Model Fit	124

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE NO.
1.1	The Proposed Conceptual Model Colligating between the Latent Constructs of OCB	5
1.2	Structure of HPHR System	12
2.1	Direct or Indirect Sources and Consequences of OCB	37
3.1	Predictor Variables of Organizational Citizenship Behavior (OCB)	85
3.2	The Research Model (M1)	86
4.1	Measurement Model for High-Performance HR Practices.	99
4.2	Measurement Model for Psychological Climate	102
4.3	Measurement Model for Work Engagement	105
4.4	Measurement Model for Organizational Citizenship Behavior (OCB)	108
4.5	H1, H2, H3 Results	119
4.6	The Research Model (M1)	122
4.7	The Alternative Model (M2)	123

LIST OF ABBREVIATIONS

EFA	Exploratory Factor Analysis
CFA	Confirmatory Factor Analysis
HR	Human Resource
IT	Information Technology
HPHR	High-Performance Human Resource
IV	Independent Variable
DV	Dependent Variable
SD	Standard Deviation
HPWS	High-Performance Work Systems
OCBs	Organizational Citizenship Behaviors
LMX	Leader-Member Exchange
SEM	Structural Equation Modeling
OC	Organizational Commitment
AC	Affective Commitment

Chapter I

Introduction

“Organizations do not ‘perform’; individuals in organizations perform in ways that allow the organizations to achieve desirable performance outcomes”.

Kozlowski and Klein, (2000)

The profound influence of human capital on the success and growth of any organization is momentous and cannot be unheeded in the contemporary business world. The pre-requisite to increase organizational performance and effectiveness is undoubtedly a talented and dedicated workforce, and is recognized as vital for the health of an organization. Though human resources are considered the most important assets of an organization, a growing area of concern reveals that very few organizations are able to fully harness its potential (Ahmad & Schroeder, 2003). Additionally, in the light of fierce competition, rapid pace of technological shifts, and increasing demands of knowledge workers, effective management of human capital is more challenging than ever before. As knowledge workers have several job options. Another major difficulty is prodigious expectations of organizations from their employees, like to be proactive, innovative, and committed towards work and the organization. These challenges require organizations to build new capabilities and to create an environment where talent can bloom (Bhal, 2002).

As a matter of fact, organizations are keen to attract and retain extraordinary employees who are not only capable and willing to perform job tasks efficiently but are also keen to work in a virtuous manner and shoulder responsibilities over and above their in-role activities. Organ (1988) referred to these competencies and significant initiatives as organizational citizenship behavior (OCB). OCB is defined as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promotes the effectiveness of the organization”. For example, employees’ voluntary acts of helping new colleagues, volunteering for extra duty when needed, acting in ways that improve morale, keeping other organizational members informed of matters that might affect them, contributing responsibly to corporate governance by staying informed of political developments and expressing opinions about them, and not complaining about minor nuisances at workplace or accepting less than perfect working conditions etc. Employees who exhibit such behaviors tend to yield significant advantages

to organizations such as resource utilization, increment in productivity, performance stability, and increased ability to adapt to environmental changes, profitability, efficiency and lower turnover (Podsakoff et al. 2000; 2009; Pare & Tremblay, 2007).

Notable in this direction, citizenship behaviors are exercised within the discretion of individuals; they generally have more control over the amount of citizenship behaviors they exhibit at workplace (Werner, 2000). It is also not sufficient that employees just show up; they need to assume the role of good organizational agents.

However, it is a two way process and much effort is needed on the part of organizations to nurture and leverage employees' holistic involvement with their work and the willingness to outperform job duties (Kataria, Garg, & Rastogi, 2013). Tan and Tan, (2008) also noticed that organizations can affect certain factors to the extent that they have significant influence on employees' work behaviors. As citizenship behaviors do not occur at the ordinary workplace, they are promoted by the organization, particularly through the implementation of policies and practices during the strategic planning process. Considering this, organizations are required to embrace a strategic perspective on their human capital management. Along with these efforts, providing employees a stimulating workplace is of ominous significance where employees can improvise and consequently help their organization to flourish in the present scenario.

Keeping the above facts in mind, it becomes important to understand how business organizations create environments that motivate OCBs. Identifying factors predictive of employees' expressions in OCBs would be particularly significant, as organizations would then be better equipped to facilitate conditions for increased OCB at workplace.

Since the development of the construct, an extensive amount of early research has underscored the critical importance of positive attitudinal and dispositional factors (such as organizational commitment, job satisfaction, conscientiousness, agreeableness, and empathy) which may spur employee manifestations in OCBs. The next stream of literature has paid attention to the employees' perceptions of justice and organizational support to explain their level of involvement in OCBs. Another line of research has revealed that OCBs flow from employees' inner drive to invest their personal energies in outperforming job activities based on motivational factors such as prosocial values, organizational-concern, and self-concern. Only recently, OCB research has begun to discern that situational factors may provide opportunities for the display of OCBs such as job characteristics and social relationships.

Undoubtedly, identification of a diverse range of attitudinal, dispositional, motivational, and contextual constituents of OCBs has helped build a strong foundation for this body of literature. Besides, several frameworks have also been developed that focus on the simultaneous examination of the relative impact of individual and organizational factors on OCBs. However, strong focus on the employee attitudes (e.g. organizational commitment) and temporary emotional ranges (e.g. job satisfaction) has left the field with a limited purview of the citizenship performance, there is still a lack of clarity regarding how positive workplace behaviors occur and evolve into citizenship (Dierdorff et al., 2012; Organ et al., 2006; Penner et al., 2009; Somech & Drach-Zahavy, 2012; Wei et al., 2010). The field lacks a thorough understanding and modeling of processes explaining the functional perspective of changing organizational contexts and individuals' psychological processes on OCBs. Hence, a better understanding of how contextual and psychological arrays function towards OCBs is needed both from a theoretical and practitioner viewpoint.

In the light of social-exchange perspective, the present study attempts to model (see Figure 1.1) antecedents of organizational citizenship behaviors, addressing the role of high-performance HR practices, psychological climate, and work engagement, with specific reference to IT organizations in India. In so doing, the study attempts to differentiate between distal and proximal precursors that direct mediated relationships in predicting organizational citizenship behaviors.

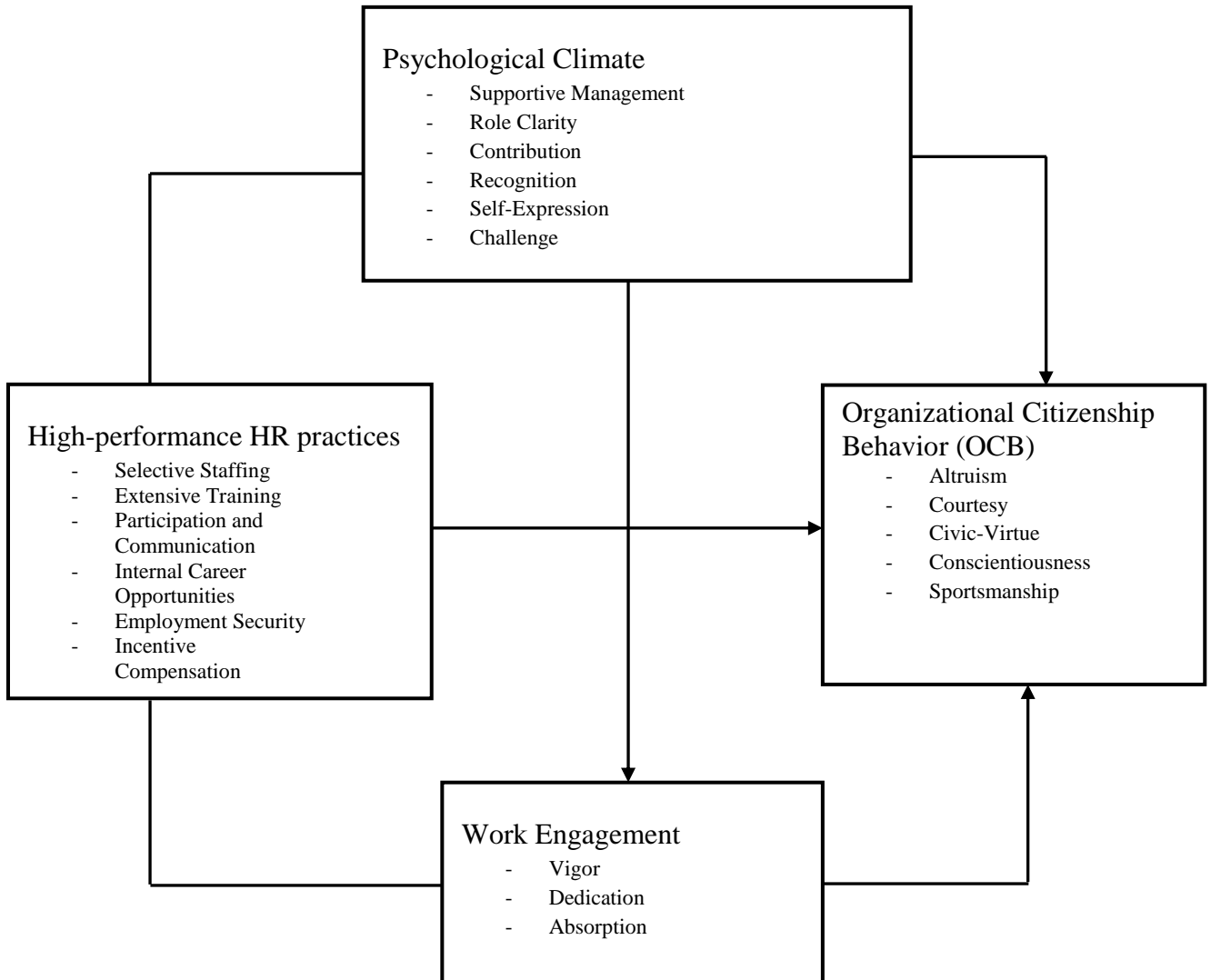
Human resource management function can play a strategic role in enhancing employee motivation and commitment to the organizational goals, and that effective human capital management and development in organizations may also encourage and sustain OCBs (Frenkel, Restubog & Bednall, 2012; Karatepe, 2013; Sun, Aryee, & Law, 2007; Wei et al., 2010; Yang, 2012; Zhang, Wan, & Jia, 2008). With this recognition, the concept of high-performance human resource practices have begun to surface lately and have arguably intensified a dialogue on the behavioral perspective of strategic HR. The basic assumption behind this research stream is that some HR practices are always better than other and organizations need to adopt these practices (Delery & Doty, 1996). Since the focus is on maximizing employee performance at workplace through organizational efforts towards its human resources, there has been growing interest in the employee perspective of high-performance HR practices.

High-performance HR practices are coherent practices that focus on employee development, participation in decision making, and motivation to put forth discretionary or spontaneous efforts at workplace (Appelbaum, Bailey, Berg, & Kalleberg, 2000, p. 26). For instance, empowerment enhances employees' decision-making competencies and makes them feel worthy, responsible, and free to optimally channel their creativity and workplace competencies towards organizational goals (Pare & Tremblay, 2007). While creating feelings of belongingness and infusing a sense of responsibility towards the organization, empowerment enables employees to perform extra roles, bear additional job responsibilities, and demonstrate increased autonomy at work (Yang, 2012).

Firms using high-performance HR practices (such as sophisticated recruitment processes, sensitive selection, extensive training, participation and communication, performance appraisals, rewards and compensation) can induce greater employee involvement and work performance by enhancing employee competencies and motivation to achieve organizational goals. In fact, organizations can develop a high-quality employment relationship with its employees through a resource-based approach towards human capital where organizational effectiveness contributions are the outcome of a social exchange relationship between employees and the organization. Keeping this in mind, the study highlights the potential of encouraging HR practices organizations need to focus in order to encourage employees' citizenship behaviors at work.

Going through the myriad of researches, it has been observed that OCBs can also be generated within employees through managerial support, trust, autonomy, and feedback. In fact, employees' positive perceptions of their immediate work environment attributes help them experience organizational commitment towards employee well-being at work which may further motivate employees to reciprocate in positive ways by exhibiting OCBs. For instance, beyond simply supervising employees' job duties and responsibilities, managers can play an imperative role in making their employees feel supported and trusted and as a result more productive. Especially in dynamic environments where business results are directly proportionate to the efficiency of employees, making employees feel harmony and collaboration at work is essential.

Figure 1.1 The Proposed Conceptual Model Colligating between the Latent Constructs of OCB



Further, encouragement to employee participation, motivating job characteristics, and increased decisional latitudes may influence employees to exhibit citizenship behaviors. In addition, interpersonal harmony, freedom of emotional expressions and recognition of employee efforts will spurt exhibition of citizenship behaviors within organizations. And this platform can be experienced through favorable environmental conditions, which provide an opportunity for employees to contribute meaningfully to their organizations, while considering for enhanced performance and heightened productivity.

A lacuna has been observed in the organizational sphere, where fewer initiatives have been taken up to consider employees' perceptions of work climate, from the perspective of their well-being. Employee perceptions of the work context take on personal meaning and implication through a psychological process in which an emotional representation of the characteristics of the work context is interpreted in the light of the psychological needs and in terms of its importance for their own well-being.

The present study has been initiated with the objective to bring the well-being of employees into limelight. As it is a well-known fact that to compete in the global marketplace, heightened response to research, innovation, and information systems has become mandatory, but this could never be ignored that some worldly aspects as: globalization, fierce competition, and disruptive economic conditions, should not influence the eudemonic status of work life. That is, our sense of well-being and so efforts must be directed to achieve a greater level of motivation, while not considering only materialistic well-being. Hence, it becomes mandatory for every organization to elicit employees' meaningful representations of the psychological climate. Organizations need to provide that quality of work life which provides well-being at workplace, while facilitating positive contextual attributes in terms of supportive management, role-clarity, recognition, meaningfulness, self-expression, and job challenge (Brown & Leigh, 1996).

Another construct that has been taken up in the study, while considering the well-being of employees is Work Engagement, which is also an essential nutriment for delineating the citizenship behaviours. Engagement is not a concept defined by a single indicator but rather entails different domains of psychological state and areas of expression which ensure positive attitudinal and behavioral energies at workplace. Therefore, employees should be highly engaged with their work to demonstrate enhanced performances in organizations.

In the face of global economic fluctuations and subsequent downturns of the state economies in present times, it has become very arduous for organizations to boost employee performance by centering only on the traditional notions of job satisfaction, involvement and organizational commitment. More importantly, no organization can achieve its strategic and operational goals without maximizing the employees' contribution that takes into account active physical, emotional, and cognitive involvement with their work.

There has been a shift in emphasis within the organizational research and practice, away from the temporary generalities of employee sentiments at work (e.g. job involvement or organizational commitment) that might be responsible for organizational citizenship behaviors, such as employees' disposition and capability to commit their positive energies at work and working in harmony with organizational objectives, such as work engagement. In fact, the evolution of this recent perspective on employees' enduring state of emotional involvement with the work i.e. 'work engagement' seems to be a promising strategy for augmented positive organizational outcomes such as OCB.

However, the degree of work engagement which represents a positive and fulfilling state of mind is featured by the employee based on their evaluation of the work context (Shuck & Herd, 2012). This implies contextual attributes in the organization may have psychological implications for employees. In order to motivate employees to express themselves physically, psychologically, and cognitively, organizations are required to provide economic and socioemotional resources to them while employees experiencing psychological conditions of meaningfulness, safety, and availability at workplace (Saks, 2006). It has also been hypothesized that this critical state of well-being of employees is affected by the HR system in the organization. And, the kinds of HR practices that are admired in the organization may shape the psychological context and conditions for employees. For instance, pay and promotion policy might render positive perceptions of just and fairness to employees. Similarly, reward for performance may alter employees' perceptions of recognition and meaningfulness at work.

This way, high-performance HR practices in organizations may be featured as having the strategic potential to enhance the quality of employees' workplace experiences. It appears that when HR practices focus on creating and developing working conditions for employees to attain a sense of well-being and care while performing the job duties, it is likely that employees perceive work environment attributes as favourable and friendly leading to enhanced state of well-being at work. The present study emphasizes the importance of high-performance HR practices for shaping the quality of work contexts, while employees demonstrating enduring state of mind at work in terms of work engagement.

As observed, high-performance HR practices act as an integral force in organizations, eliciting employee citizenship behaviors at the workplace. But the relationship between high-performance HR practices and OCBs may not be

straightforward. Little is known about the mechanisms by which such practices exert their strategic influence on employees' increased tendency of exhibiting desirable workplace behaviors (Tang & Tang, 2012; Tremblay et al., 2010; Zhang & Agarwal, 2009). Most of the recent theoretical frameworks focus primarily on the indirect effect of HR practices on OCBs through employee attitudes (such as organizational commitment, justice perceptions) and temporary generalities of employee sentiments (e.g., job satisfaction), and OCBs (Alfes et al., 2012). Other individual difference variables that may hold the holistic view of the functional perspective of HR systems on OCBs require investigation and elucidation. Moreover, most studies on high-performance HR practices and organizational citizenship behaviors have been conducted in western countries. The amount of available evidence regarding the impact of HR practices on OCBs from non-western countries is limited (Zhang & Agarwal, 2009). In this respect, the model proposed in the present study suggests that high-performance HR practices will have an impact upon employee perceptions of their immediate working environments (i.e. psychological climate), well-being and personal fulfillment (i.e. work engagement) and ultimately on organizationally desirable behaviors (i.e. OCBs).

Social exchange theory (Blau, 1964) and the norm of reciprocity (Homans, 1961) provide a solid theoretical background for the conceptual model. The process of social exchange is initiated by the employers when they show that employees' contributions are valued at the workplace and individual interests and psychological needs are taken care to enhance their personal well-being.

OCBs can be regarded as the results of such positive beneficial actions. If employees perceive the organization's care and respect towards them, they are more likely to display citizenship behaviors. Of particular interest to the current study are the derivations of social exchange theory termed as high-performance HR practices and psychological climate. When organizations implement HR practices with a genuine concern for employees' well-being, they can reach high performance (Yang, 2012). It is proposed that high-performance HR practices would send the signal to employees that the organization values its human capital, facilitates positive working conditions, cares for employee well-being, and is willing to establish a high-quality exchange relationship with them. These organizational dynamics may reinforce employees' positive perceptions of their work climate. And, employees who perceive stimulating working conditions in the organization may feel obliged to invest their personal resources for the benefit of the

organization. Likewise, on the basis of the social norms of reciprocity (Homans, 1961), employees feel compelled to increase their efforts when receiving a favor from the employer (Clark et al., 2013).

With the dyad and dynamic combination of high-performance HR practices and psychological climate, it is believed that this combination can definitely contribute to the formation of social-exchange framework, wrapped up with the sheath of the sense of well-being, as managers position the needs of the organization and that of employees in such a way which promote reciprocal interdependencies, positive experiences and psychological fulfillments leading to high citizenship performance at workplace.

1.1 RESEARCH GAPS

In collectivist societies like India (Hofstede, 2001), interpersonal relationships, dependency, and social obligations are of particular importance (Aryee, Budhwar, & Chen, 2002). If such behaviors occur within organizations, these are considered to be as indicators of high employee involvement and commitment. It therefore, seems valuable to examine the occurrence of OCBs and to look into strategic HR interventions, climate perceptions and work engagement as potentially important antecedents of OCB in such a culture.

Being a growing economy, and especially the IT sector, which is characterized by boundary spanning projects, team-based work, group performances, ongoing coordinations and collaborations, and interdependences in work groups, citizenship behaviors represent the appropriate investment of resources and a critical factor for the success of IT units. The legitimacy and enormous appeal of the concept of OCB in IT organizations can be attributed to working environments with high ambiguity, high demand for change and learning, a high level of job stress (Love & Irani, 2007), and frequent alterations in the business climate in addition to advances in technology (Allen et al., 2008; Chiang et al., 2013). Therefore, empathizing how to advance IT professionals' willingness to get involved into facilitation of citizenship performance at workplace to benefit organizations is a needed area of study. This evidence calls into consideration the role of high-performance HR practices, psychological climate, and work engagement as crucial determinants of OCB in these organizations for six reasons:-

- **First**, despite the increasing significance of OCBs for IT professionals, identification of factors enhancing employees' manifestations in OCBs is rare in the IT literature (Chiang et al., 2013).
- **Second**, the increasing desire to stimulate performance beyond expectations in the workplace has resulted into organizations operating in India transforming traditional HR practices into high-performance HR practices at a high pace to create a congenial working climate where employees feel valued and treated with respect (Biswas & Verma, 2007). And hence, calling for the investigation of the impact of high-performance HR practices on employee workplace behaviors such as OCBs.
- **Third**, despite the considerable progress that has been made in improving the overall understanding of the mechanism involved in the relationship between high-performance HR practices and OCBs, there remains considerable room for development of intermediate psychological processes and underlying mechanisms.
- **Fourth**, the study examines the mediating role of psychological climate in the relationship between high-performance HR practices and citizenship performance which has been studied very less in the previous research to explain the constant evolution of the psychological process of employee involvement in OCBs (Wei et al., 2010).
- **Fifth**, the psychological mechanism of work engagement in the workplace may fully explain a holistic review of the relationships between HR practices, psychological climate and OCBs. Notably, perceptions dispose employees to form an active physical, cognitive, and psychological state, which in this case is work engagement. The nascent approach of engagement at work has lately begun to emerge as an alternative pathway for the evocation of a wide range of positive attitudes and behaviors directed towards the organization. This furthers the need to improve our existing understanding of the relationships among the differing antecedents and OCBs (Podsakoff et al., 2000) with the inclusion of a positive psychological construct of work engagement.
- **Last**, there are no studies to the knowledge of the researcher which weave the four constructs of high-performance, psychological climate, work engagement, and OCBs into a single study.

By assuming high-performance HR practices as heading source in eliciting OCBs, the current study not only explores the relational path from high-performance HR practices to individual level outcome variables as the determinants of organizational effectiveness but also offers the potential to untangle the black-box (examining the intermediaries) of the HR practices-organizational effectiveness relationship. **Figure 1.1** shows the proposed conceptual model of the present study that represents an engagement oriented view of HR practices and psychological climate that may drift OCBs.

1.2 CONCEPTUAL CONSIDERATIONS

1.2.1 High-Performance HR Practices

“Valuable human capital is like the main artery of technology enterprises, and human resource practices play a fundamental role in keeping that artery functioning”.

Zhang et al., (2008)

The resource-based perspective on HRM has certainly led to a shift in focus on HR practices from considering purely administration and documentation function to optimal resource utilization (Biswas, 2008). And, to bring this perspective into practice, HR practices must develop employees’ skills, knowledge, and motivation to increase their productive potential for the organization (Schuler & Jackson, 1995).

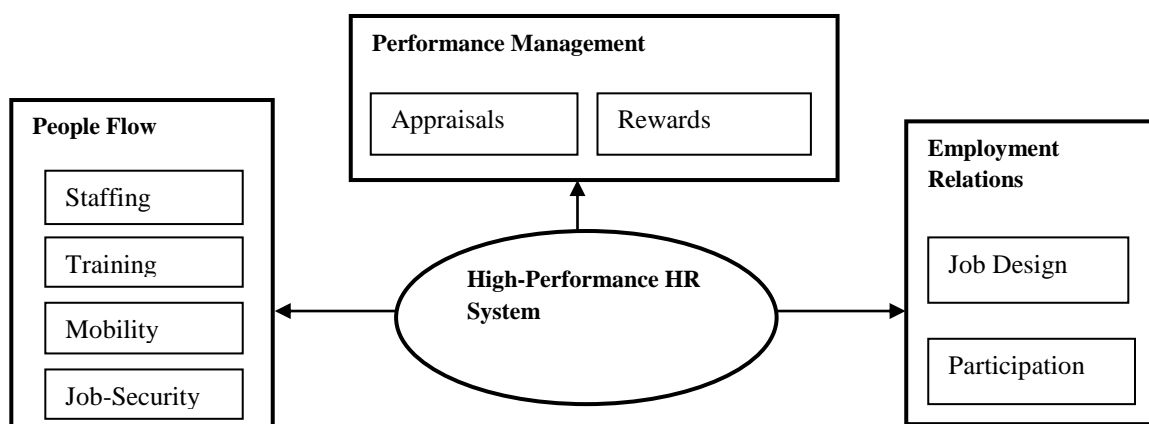
Corresponding to this is a body of research marked as strategic human resource management (SHRM), which aims to understand how human resource management practices (not independently, but in combination) can affect organization-wide outcomes with support for a ‘high-performance’ approach to human resource management (Kehoe & Wright, 2013). Performance-oriented HR systems deal with nothing different but explicate how diligently an organization execute and implement core HR practices in order to encourage employees to maximize workplace efficiency. Hence, these practices have strategic value for the companies applying them.

Building on this rationale, Bamberger and Meshoulam (2000) put forward the concept of high-performance HR practices while elaborating an integrated framework that encompasses two significant approaches (resource-based and control-based approach) of HRM. On the one hand, there are control oriented HR practices (such as performance-related pay and employee rewards based) that emphasize quantifiable exchanges between the organization and the employee. On the other hand, there are those practices that aim to

forge psychological links between organizational and employee goals such as participation in decision-making (Gooderham et al., 2008). Notably, both the approaches are too narrow to be considered individually to accommodate the broad realm of human capital management. An integrated framework accommodating both these approaches allows an HR system to perform functions that are significant to enhance workforce skills, capacity, motivation, and opportunity for carrying out the duties in an optimal manner. These functions cover the broad domain of human resource management and include three main human resource subsystems: 1) Maintaining people flow (through selective staffing and extensive training), assuring employee mobility (by defining career paths and development programs), and guaranteeing employment security. 2) Managing appraisals and rewards (by facilitating performance based appraisals, designing competitive compensation system, and granting other benefits such as bonus and extensive rewards). 3) Establishing high-quality employment relations (by defining broad job descriptions and encouraging employee participation and effective communication).

According to Bamberger and Meshoulam (2000, p. 67), an integrated measure of high-performance HR practices should assess sophisticated selection, extensive skills training, broad career paths, promotion from within, guaranteed job security, results-oriented appraisal, extensive and open-ended rewards, broad job description, flexible job assignment, and encouragement of participation.

Figure 1.2 Structure of HPHR System (adapted from Bamberger and Meshoulam, 2000)



Effectiveness of high-performance HR systems flows from HR practices through people to performance. For example, Guthrie and Olian (1991) observe that selection practices have an effect on the characteristics of the employees and managers selected for jobs. Delaney and Huselid (1996) pointed out the significance of enhancing level of skills and abilities of the current workforce for performance outcomes. Although, a varied set of specific HR practices has been suggested for the inclusion in high-performance HR systems across studies (e.g. Lepak & Snell, 2002; Zhang et al., 2008; Wei et al., 2010; Kohoe & Wright, 2013), but there has been an uncertainty as to which of the many “high performance” HRM practices (Delany et al., 1989) actually facilitate superior performance (Ferris et al., 1999; Gooderham et al., 2008).

The basic idea is to design and implement a set of internally consistent HR policies and practices that lead to effective human capital management in the organization. Based on Bamberger and Meshoulam’s (2000) recommendations, Sun et al., (2007) have developed a typology for an integrated set of high-performance HR practices including eight specific domains of selective staffing, extensive training, internal mobility, employment security, clear job description, result-oriented appraisal, incentive reward, and participation. Based on the same premises, Zhang et al., (2008) have also specified eight high-performance domains of human resource practices including selective staffing, extensive training, internal mobility, employment security, clear job description, result-oriented appraisal, incentive reward, and participation. Relatedly, Wei et al., (2010) have conceptualized a performance-oriented set of six specific domains of HR practices including internal career opportunities, extensive training, employment security, sensitive selection, incentive compensation, and participation and communication.

While these HR practices have been chosen and designed to achieve the broad objective of creating high-performing organizations, Bowen and Ostroff, (2004) suggest that all the components of the HPHR systems should be so formulated to achieve a specific organizational objective such as service or innovation. Based on this observation, Liao et al., (2009) have anchored a set of HR practices which may enhance employees’ competencies, motivation, and performance in providing high-quality service to external customers of a firm. This HR configuration includes ‘service quality’ based hiring, training, information-sharing, self-management teams, participation, and compensation, job design for quality work, performance appraisal, internal service, service discretion,

performance feedback, and employment security. The underlying goal is to effectively manage human capital for service delivery, and subsequently service performance.

The above described HR configurations highlights several human capital development tendencies that together comprises what Kohoe and Wright, (2013) have constructed under three main dimensions as (a) ‘ability-enhancing practices’ such as selectivity in staffing procedures, high pay, and training opportunities (b) ‘motivation-enhancing practices’ for example, performance based rewards, formal performance evaluation, and merit based promotions and (c) ‘opportunity- enhancing practices’ including participation, autonomy, information-sharing, and regular communication.

In addition to the common thread that ties together different aspects of high-performance approach, Lepak and Snell (2002) draw our attention towards a value based classification of HR configurations (related to job design, recruitment and selection, training and development, performance appraisal and compensation) for the management of different employee groups (e.g. knowledge workers, job-based employees, contractual employees, and workers in partnership/alliances). Basic assumption for this classification is the association between human capital characteristics and their varying degree of uniqueness and value to the firm. In terms of strategic value of human capital, a firm can use different sets of HR practices in distinct ways. For instance, commitment-based HR configuration that conveys higher levels of investment in employees has been suggested for knowledge workers, productivity-based HR practices for the next significant employee group i.e. job-based employees who support the core employees, collaborative HR practices for contractual workers, and compliance-based HR practices for alliances which require relatively lower levels of investment in employees. Specifically, firms largely vary in managing their core employees group. In practice, firms choose among commitment-, productivity-, and collaborative-based HR practices for both knowledge workers and job-based employees as well. Though the strategic value and uniqueness of human capital differs across these four employee groups, the basic idea of such an observation is to enhance our understanding of the use of a particular type of HR configuration for each employee group.

In sum, there is a commonality across practices in any high-performance approach that focus on creating, managing, and developing human capital pool for the organization to sustain competitive advantage. Following this, the study focuses on six domains of high-performance HR practices including internal career opportunities, extensive training,

employment security, sensitive selection, incentive compensation, and participation and communication to tap individual employees' actual experiences of these practices. These practices have been originally conceptualized and measured to tap human resource managers' perceptions of HPHR practices by Wei et al., (2010).

1.2.2 Psychological Climate

“The reality of the organizational environment is much less important than individual perceptions of the environment”

James and James, (1989)

Since the 1970s, applied psychologists and management researchers have devoted considerable attention to studying the meaning of individuals' work environment perceptions in a variety of public, private, and military organizations (Burke, et al., 2002, p. 325). With the classical formulation of behavior as a function of the person and his or her psychological environment: $B = f(P, E)$ (Lewin, 1951), climate research has been the subject of thorough analysis of employees' perceptions of their work environment that affect individuals' behavior in organizations (Schneider, 1975a).

James et al., 2008 describes the psychological phenomenon of climate as “cognitive revolution” whereby human cognition mediates the effects of environmental stimuli on human responses. In other words, climate is the intermediate linkage between the individual and the organization that serves an important sense making function (Weick, 1993). In terms of the functional characteristics, climate has been posited as both a situation attribute (i.e., unit level or organizational climate) and a subjective, individual attribute (i.e., perceived or psychological climate). Notably, the concepts of organizational climate and psychological climate are conceptually related to one another (both refer the same content), but they describe qualitatively different phenomena at the individual and unit levels of analysis (Schulte et al., 2006). For instance, organizational climate is said to exist when employees of an organization agree on their perceptions of the work environment. And, individual perceptions of work environment features are referred to as psychological climate. In specific, psychological climate refers to the perceptual and experiential components of a reciprocal interaction between the organizational work environment and the individual employee (Michela et al., 1995). Such perceptions and evaluations of virtually all aspects of the work environment can be idiosyncratic that are cognitively represented in terms of their psychological meaning and significance to the

individual (James, 1982, p. 219). Hence, organizational climate is a high-level collective phenomenon (a collective, summary description of the work environment or aggregate responses) and psychological climate is an individual phenomenon (individual descriptions of the work environment (Burke et al., 2002; Schulte et al., 2006).

Psychological climate has been defined in a variety of more or less similar ways. James and Sells, (1981) define it as “individuals’ cognitive representations of relatively proximal situational events, expressed in terms that reflect the psychological meaning of the situation to individuals”. In a more similar manner, (Parker et al., 2003) describe psychological climate as a molar construct comprising an individual’s psychological meaningful presentations of proximal organizational structures, processes, and events. These perceptions or cognitive reflections are based upon individuals’ experiences with the immediate forces in their work settings. As a criterion, psychological climate is shaped by employees’ perceptual-cognitive processes evaluating the degree to which their psychological needs are fulfilled in the organizations. For instance, psychological climate reflects a judgment by the individual about “the degree to which environmental attributes at workplace are personally beneficial versus detrimental (damaging or painful) to his/her sense of well-being” (James, James, & Ashe, 1990, p. 53). Taking together, these conceptualizations render psychological climate as “an experiential-based, multidimensional, and enduring perceptual phenomenon” (Koys & DeCotiis 1991).

In sum, psychological climate signifies employees’ sense making of the work context based on the cognitive inferences of situations and psychological processing of perceptions into more meaningful interpretations of organizational realities.

Though a consensus exists upon the conceptualization of psychological climate in the extant literature, there is still little agreement as to the specific structure or the dimensionality of the construct. Broadly, employees’ perceptions of almost every aspect of their immediate environment concerning jobs, physical environment, supervision, top management, and co-workers, have been included in psychological climate research (Parker et al., 2003; Martin et al., 2005). Concomitantly, a wide range of climate elements has been addressed in the psychological climate research leading to the general fuzziness of the construct. For instance, Koys and DeCotiis (1991) have outlined eight sub dimensions of psychological climate which they derived from over 80 differently labeled dimensions of psychological climate reported in the literature. These sub dimensions put emphasis on the quality of superior-subordinate relationship including factors such as

support, trust, recognition, and fairness, and measure employees' perceptions of other focal workplace attributes such as innovation, cohesiveness, autonomy, and pressure.

One of the prominent composition of psychological climate has been featured in the literature is the four-dimensional model developed by James and his colleagues (James & Sells, 1981; Jones & James, 1979; James et al., 1990), which provides a comprehensive coverage of the various facets of the climate including on job characteristics (such as autonomy, challenge, feedback, and significance), role characteristics (relating to role ambiguity, overload, stress, and lack of harmony), work group characteristics (relating to work group cohesiveness, pride, friendliness, and warmth), leader characteristics (relating to leadership facilitation, interaction, support, and goal emphasis). These workplace attributes mutually reinforce each other to create an overall impression of the organizational environment on employees' mind.

In addition, some other scholars have also proposed different set of psychological climate configurations. For example, Kopelman, Brief, and Guzzo (1990) have suggested an array of five psychological climate dimensions including goal emphasis, means emphasis, reward orientation, task support, and socio-emotional support. Furthermore, based on Kahn's (1990) recommendations, Brown and Leigh (1996) have enumerated some important facets of the work context (such as supportive management, role clarity, self-expression, recognition, contribution, and job-challenge) which may have psychological implications for employees concerning safety and meaningfulness at work and measured that their perceptions of such work contexts (i.e. psychologically safe and meaningful) generate a sense of self-worth, value, and responsibility and may even contribute to organizational success through greater employee involvement, effort, and performance.

Hart, Wearing, Conn, Carter and Dingle (2000) have more recently identified another array of seven core psychological climate dimensions from the literature related to role clarity, supportive leadership, participative decision-making, professional interaction, appraisal and recognition, professional growth, and goal congruence.

Notably, these scholars have advanced psychological climate as a system, comprising of a set of coherent climate dimensions (i.e. PCg), following a configural approach (Schulte et al., 2006). Configural approach assumes that different organizational

attributes are likely to integrate with each other, making the total effect greater than the sum of individual dimensions (Bowen & Ostroff, 2004).

Though a large body of literature on “facet-specific climates” (e.g. a climate for service or a climate for safety) has been flourishing lately, yet it is observed that configurations may provide a more integrative view of the overall climate in a particular unit or organization than focusing on single climates (Schulte et al., 2006). Many researchers have also advocated the incremental validity of the configural approach over social constructionist approach. Similarly, the present study considers psychological climate as being comprised of a universal (generalizable) set of dimensions or factors as outlined by Brown and Leigh (1996). These include:

- **Supportive Management-** It is comprised of employees’ perceptions of environments of openness and trust, collaboration and harmony with supervisors, developmental feed-back from managers, and flexibility with regard to methods of tasks completion. Supportive management motivates employees to trust their working environment in ways that allow their authentic selves to emerge in practices.
- **Role-Clarity-** It is an important facet of employees’ climate perceptions, clarity in work roles represents an opportunity for employees to perceive well-specified responsibilities and contribute meaningfully to their organizations.
- **Recognition-** It represents a proximal situational referent which deals with a significant psychological enquiry, i.e. whether organizations formally acknowledge employees’ unique performances, extra-efforts and contributions made in favor of enhanced organizational effectiveness.
- **Job Challenge-** This dimension represents another significant factor which constitutes employees’ perceptions of experiencing optimal challenges in performing their work roles and employees’ evaluations of the opportunities of personal growth, learning and development in such working conditions.
- **Meaningfulness-** Another significant constituent of psychological climate is employees’ perceptions of the identification with their work roles and perceived meaningfulness of contribution towards organizational process and outcomes, which facilitate the conditions of psychological meaningfulness accompanied by a sense of value in goal accomplishments.

- **Self-Expression-** It constitutes working conditions that allow employees to employ themselves authentically in their work roles and infuse a feeling of psychological safety in them. It captures employees' perceptions of work settings that provide them with a freedom to implement the unique features (skills, talent) of their individual personalities, and enhance their experience of the freedom of self-expression in the organization.

The above mentioned aspects with regard to the psychological climate are investigated in this study because previous research such as Thayer, (2008) has demonstrated that these are relevant contextual supports for OCBs and voluntary initiatives at workplace. In a similar vein, it is assumed that organizations active considerations to recognize employees' contributions, understanding their intrinsic right to be respected, feel valued and developed at work, having a room for self-expression etc. may develop a sense of obligation in them to care about the organization and that in turn, may increase manifestations in positive workplace behaviors (Eisenberger, Huntington, Hutchinson, & Sowa, 1986).

1.2.3 Work Engagement

Since the dawn of this century, the positive psychology movement has been conducive to bring about a positivity-based focus shift in the domain of occupational health psychology while eradicating the traditional psychopathological view within every aspect of human life related to deficits and malfunctioning. For instance, instead of focusing on the conditions that create stress or burnout at workplace, occupational health psychology seeks to shed a new light on the well-being of employees. In fact, the procreative integration of positive psychology towards the positive paradigm of organizational settings has led to a paradigm shift from the traditional notions of job satisfaction, involvement and organizational commitment to the more comprehensive and dynamic approach of 'engagement at work' (Kataria et al., 2013). Noted in this direction, the most illustrious positive organizational construct originated recently and recognized widely in present times is work engagement (Bakker & Schaufeli, 2008; Shuck, Reio, & Rocco, 2011).

Engagement is a complex and dynamic process that reflects each individual's unique, personal relationship with work (Litten et al., 2011). Touted positive outcomes of employee engagement in Gallup's popular release "First, Break All the Rules (Buckingham & Coffman, 1999) have incorporated subsequent desires in organizations to maintain a highly engaged workforce.

Kahn (1990) has pioneered the academic research on engagement using a framework of ‘personal engagement’ and ‘personal disengagement’. He describes personal engagement as “a state, in which employees ‘bring in’ their personal selves during work role performances, investing personal energy and experiencing an emotional connection with their work” (p. 694). Additionally, he has identified that employees’ psychological experiences at workplace are significant and necessary for an employee to invest his/her personal energies into their work role performance. According to Kahn (1990), engagement reflects a high level of psychological presence when occupying and performing an organizational role.

The fulgent beginning of engagement literature with the works of Kahn (1990) has drifted considerable attention and inclination of researchers in recent times. Numerous definitions with more or less similar viewpoints on engagement have been well constructed thereafter:

Kahn (1990, p. 694) defines personal engagement as “the harnessing of organizational members’ selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during work role performances”.

Rothbard (2001, p.656) defines engagement in terms of psychological presence, attention, and absorption. Attention refers to “cognitive availability and the amount of time spends thinking about a role” while absorption “means being engrossed in a role and refers to the intensity of one’s focus on a role”.

Maslach et al., (2001) views engagement as the antipode of burnout where engagement is characterized by energy, involvement, and efficacy, the positive antithesis of the three burnout dimensions of exhaustion and cynicism.

Harter et al., (2002) view engagement as “the individual’s involvement and satisfaction with as well as enthusiasm for work”.

Schaufeli et al. (2002, p. 74) define engagement “as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption.”

Robinson et al., (2004) define engagement as “a positive employee attitude towards the organization and its values, involving awareness of business context, and work to improve job and organizational effectiveness”.

Saks, (2006) defines engagement as “a distinct and unique construct that consists of cognitive, emotional, and behavioral components that are associated with individual role performance” (p. 602).

Shuck & Wollard, (2010) delineate employee engagement as “an individual employee’s cognitive, emotional, and behavioral state directed towards desired organizational outcomes” (p. 15).

Schaufeli et al., (2002) represent an interesting viewpoint on engagement and termed it as ‘work engagement’, an antipode of burnout and yet a unique construct in organizational sciences. Work engagement signifies “a positive, fulfilling, affective-motivational state of work related mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al., 2002, p.74). Vigor and dedication represent energy and identification and that have been emerged as direct opposites of two burnout dimensions as emotional exhaustion and cynicism respectively (Maslach & Leiter, 1997; Schaufeli et al., 2002), whereas absorption was found to be a relevant and distinct aspect of work engagement (Schaufeli, et al., 2002). In fact, burnout displays the pathological purview of psychology that centres its attention on the impairment process of human health whereas work engagement colligates positive human energies (physical, emotional, and cognitive) to work and at the same time emphasizing the positive side of psychology. Hence, in a certain way engagement and burnout have been observed as two extreme opposite expressions of well-being.

More specifically, work engagement is most favourably and frequently conceived as a critical psychological state of mind that is characterized by vigor, dedication, and absorption (Schaufeli et al., 2002). **Vigor** (positive affect) is characterised by high levels of positive energy and mental resilience at work. It is the willingness of employees’ to invest their efforts in work and persistence even in the face of difficulties. **Dedication** (motivation aspect) refers to being strongly involved in one’s work and experiencing a sense of significance, enthusiasm and challenge. It is a state in which employees’ strongly identify themselves with their work and consider it as a meaningful and significant pursuit. Further, **Absorption** (cognitive aspect) is characterised by the full engrossment in one’s work whereby time passes quickly and one finds it difficult to detach himself from work.

While putting an emphasis on the particular role of an individual in the organization, Saks (2006) has understood employee engagement as role specific with

regard to one's work role and role as a member of the organization. Following this, engagement is differentiated in terms of job engagement and organizational engagement. Likewise, Andrew and Sofian (2012) supported the idea and provided empirical distinction between job engagement and organization engagement.

The concept of engagement has been widely used and discussed for about 20 years now, on the other side of the coin, it has been the subject of greatest amount of misconception concerning its unique existence in organizational sciences (Kataria, Garg, & Rastogi, 2013). For instance, it is often misconstrued with the already existing terminologies like job involvement, organizational commitment, and job satisfaction in ways that view engagement as an overlapping construct or an umbrella term for some previously established variables like job satisfaction, job involvement, affective commitment, proactive behavior or OCB's (Frank et al., 2004; Robinson et al., 2004; Macey & Schneider, 2008; Scott et al., 2010; Viljevac et al., 2012; Wefald & Downey, 2009; Wefald et al., 2012). Work engagement is defined using definitions such as, "engagement is the extent to which an employee puts discretionary effort into his work, beyond the formal requirements of one's job". Hallberg and Schaufeli, (2006) stated that the conceptualization of work engagement involves commitment in terms of being fully engrossed and attachment to one's work. Sometimes it is superficially described in terms of employees' emotional attachment to their work and organization or as the level of commitment and involvement employee has towards organization and its values. Recently, Wefald et al., (2012) have reported the redundancy of Schaufeli's work engagement measure with affective organizational commitment in their study. In a more recent study, UWES failed to demonstrate discriminant validity with regard to job satisfaction, and less distinctiveness against job involvement and intention to stay (Viljevac et al., 2012). It seems that the notion of work engagement has been sailing on the troubled waters for its unique existence in organizational research and practice.

Whereas, Halbesleben and Wheeler (2008) established empirically that work engagement and job embeddedness are distinct constructs. Similar to this, Alarcon and Lyons (2011) emphasized the importance of engagement in the literature as a distinct construct while empirically demonstrating that engagement and job satisfaction are separate constructs. It has been argued that job satisfaction is more similar to satiation, whereas engagement connotes activation (Erickson, 2005; Macey & Schneider, 2008; Christian et al., 2011). Further, Robinson et al. (2004, p.8) stated that engagement contains

many of the elements of both commitment and OCB, but is by no means a perfect match either. What is more common in these constructs is their two way nature and the extent to which engaged employees are expected to have an element of business awareness.

Further looking into the queries, Saks (2006) argued that engagement is distinguishable from several related constructs, most notably OC, OCB, and job involvement. For instance, organizational commitment refers to a person's attitude and attachment towards their organization. Engagement is not an attitude; it is the degree to which an individual is attentive and absorbed in the performance of their roles. Supporting this, Christian et al., (2011) also advocated that engagement is a broader construct in that it involves holistic investment of the entire self. Job involvement and commitment might be facets of engagement but not sufficient for engagement (Christian et al., 2011). Job involvement is the result of one's cognitive judgments about jobs, whereas engagement is related to the active use of employees' physical, emotional, and cognitive energies in the performance of their jobs (Saks, 2006). It is further added that the focus of engagement is one's formal role performance rather than extra-role and voluntary behavior.

In sum, work engagement is essentially a motivational concept that represents the active psychological positive state of employees' mind referring to simultaneous investment of personal energies towards the tasks associated with a work role. Engaged employees are highly enthusiastic, efficacious and are involved in working hard in order to attain the desired goals of the organization. This divulges the complex texture through which well-being is usually considered, a psychologically driven but an ontological state that includes pleasure and purpose. Engaged employees are happily involved in their work and they experience their work as engrossing and something to which they can devote their full concentration (Bakker et al., 2011). Vigor, dedication, and absorption reflect relevant physical, emotional, and cognitive aspects of well-being which ensure positive attitudinal and behavioral energies at workplace. These relevant aspects of work engagement are focused with regard to the specific objectives of the present study.

1.2.4 Organizational Citizenship Behavior (OCB)

Barnard's (1938) impression of the "willingness to cooperate" has directed considerable interest from industry and management towards that constituent of job performance other than formal role requirement or task performance which has substantial impact on the capability of an organization to achieve its long term goals. While expanding and refining

his idea, several authors have made significant contributions thereafter to describe employees' positive and cooperative gestures as those extra role behaviours that are instrumental to the organizational effectiveness. A plethora of literature on such kind of behaviours has also been the outcome of Katz and Kahn's, (1966, 1978) application of role theory and classification of employee performance into role behaviour (i.e. behaviour required by the job) and supra role behaviour (i.e. behaviour not prescribed officially).

Supra role behaviors (termed as 'citizenship') have also been emphasized by Organ (1977) to make an enquiry into the job satisfaction-performance linkage. Since then, while sharing a common belief, these behaviors have been defined and termed differently in literature in terms of prosocial behaviors (Brief & Motowidlo, 1986), organizational citizenship behaviors (Organ, 1988), organizational spontaneity (George & Brief, 1992), extra-role behaviors (Dyne et al., 1995), and as contextual performance (Motowidlo, 1997). Organizational citizenship behavior (OCB) is an umbrella term which is widely recognized to incorporate a wide range of cooperative behaviors that are positive, voluntary, non-obligatory, and goes beyond the prescribed description of a job.

Organ, (1988) conceptualizes organizational citizenship behaviors (OCBs) "as discretionary, not directly and explicitly recognized by the organizational reward system, and that in aggregate, promote the effective functioning of the organization". Borman and Motowidlo, (1993) conceived the idea as contextual or citizenship performance and defined this type of performance as behaviors that are not directly related to the main task activities but are significant because they support the organizational, social, and psychological context that serves as the critical catalyst for tasks to be accomplished. Further, OCBs have been recognized as specific types of helping behaviour that can be defined as "the activities entailing a greater commitment than spontaneous assistance, in which time is given freely to benefit another person, group, organization, or cause" (Wilson, 2000). More recently, Organ (1997) reshaped the definition of OCB's as behaviors that facilitate "the maintenance and enhancement of social and psychological context that supports task performance", explicating similarity to the conceptualization of contextual performance by Borman and Motowidlo (1993).

The logic of the concept of OCB can be better understood from the way it has been defined and measured (Cohen & Avrahami, 2006). Although most scholars agree on the multidimensionality of this construct, a review of the literature reveals a lack of consensus

about its dimensionality. For instance, Podsacoff et al., (2000) have observed almost 30 overlapping or somewhat different forms of OCB's in the literature.

Smith, Organ, and Near (1983) suggested two sub dimensions of OCBs as altruism and generalized compliance. Altruism consisted of behavior directly intended to help a specific coworker. Generalized compliance refers to the behavior that is more impersonal and representative of compliance with norms. Probably, the most popular measure of OCB is that of Organ (1988) which included five dimensions as: Altruism, Courtesy, Conscientiousness, Civic Virtue, and Sportsmanship. According to Organ (1988), employees display citizenship behavior in the following ways:

- **Altruism** involves voluntary actions that directly aim at helping certain people in face-to face situations (e.g., helping orienting new employees, instructing a new employee on how to use equipment, assisting others with difficult tasks or a heavy workload, helping a co-worker catch up with a backlog of work, fetching materials that a colleague needs and cannot procure on his own).
- **Conscientiousness** describes a pattern of behaviour that goes well beyond the minimally required levels of attendance, obeying rules, punctuality, housekeeping, conserving resources and related matters of internal maintenance.
- **Sportsmanship** refers to a toleration of the inevitable inconveniences and impositions of work without complaining on fiddling issues and filing grievances.
- **Civic virtue** refers to behaviour that shows employees' constructive involvement in the political process of the organisation, including not just expressing opinions, but reading one's mail, attending meetings, and keeping abreast of larger issues involving the organisation. Hence, it includes behaviours that indicate employees' participation and concern about the life of organization.
- **Courtesy** reflects in positive gestures such as consulting with people before committing to an action that will affect them and passing along the information, aimed at preventing work related problem with others (Organ, 1988).

Recently, Gupta and Singh (2012) explored the suitability of 5-factor conceptualization of OCB developed by Organ (1988) in Indian business context. They comprehended OCBs in terms of helping a coworker, following the spirit as well as the literal rules of workplace governance, and accommodating the changes that managers

make and found that a three factor conceptualization consisting of ‘organization orientation’, ‘punctuality’, and ‘individual-orientation’ factors emerged as significant dimensions of OCB.

Taking a different perspective, Williams and Anderson (1991) has advocated citizenship behaviors as prosocial or helping behaviors and categorized the focal target of OCBs among the dimensions such as behaviors that immediately benefit specific individuals (i.e. OCB-I), thus indirectly contributing to the organization such as helping coworker with heavy workloads, taking personal initiatives to help other employees (e.g. altruism and courtesy), whereas, OCB-O reflects behaviors that are oriented towards organization and benefit the organization in general for instance, conservancy of organizational resources, maintaining attendance above the norm and the like (e.g. sportsmanship, civic virtue, and conscientiousness).

Podsakoff and MacKenzie (1994), expanded the domain of the construct by identifying two new forms of OCB, along with Altruism, Courtesy, Civic Virtue and Sportsmanship, they are: (1) peacekeeping, which consists of actions that help prevent, resolve, or mitigate unconstructive interpersonal conflicts; and (2) cheerleading, is defined as encouraging and reinforcing coworkers’ accomplishments and professional development, which can be viewed as helping behavior when a salesperson encourages a coworker who is discouraged about his or her accomplishments or professional development.

Moorman and Blakely (1995) proposed a four-dimension model of OCB and suggested that there may be different causes for different dimensions. The four dimensions of OCB are: (1) interpersonal helping, which focuses on helping co-workers; (2) individual initiative, which describes communications to others in the workplace to improve efficiency; (3) personal industry, which refers to the performance of tasks over and above the job specification; (4) loyal boosterism, which is concerned with promoting organizational image to outsiders.

Scotter and Motowidlo (1996) further refined the contextual performance construct and used the label interpersonal facilitation. It involves behaviors that contribute to organizational accomplishment. And, the second label as job dedication, which is concerned with behaviours that show persistence and efforts.

Taking a contextual perspective on OCB, Bettencourt and Brown (1997) have coined the term “service-oriented OCB” to describe “discretionary behaviors of contact employees in servicing customers that extend beyond formal role requirements”. Bettencourt, Gwinner, and Meuter (2001) have configured service-oriented OCB with three dimensions as loyalty (where employees promote organizational image), participation (refers to employees’ initiatives to enhance service performance), and service delivery (refers to employees’ conscientious behavior in activities surrounding service delivery to customers).

LePine and Dyne (1998) developed measures of helping behavior and voice behavior and differentiated the extra-role behaviors from in-role behaviors in their study. They defined helping behavior as promotive behavior that emphasizes small acts of consideration, builds and preserves relationships, and emphasizes. They defined voice as promotive behavior that emphasizes the expression of constructive challenge intended to improve rather than merely criticize.

Moideenkutty (2000) developed an OCB measure, which consisted of 12 items and the three scales as: OCB-Organization (OCB-O), OCB-Supervisor (OCB-S), and OCB-Co-workers (OCB-C). Chaitanya and Tripathi (2001) added another dimension of OCB along with the dimension of OCB as stated by Organ. And the item that was added is labeled as Perception of Organization towards OCB, showing the organization’s views on the individual’s display of behavior involving Altruism, Voluntary Behavior, Sportsmanship and Conscientiousness.

A unique and contemporary form of OCB has been identified by Choi, (2007), which is referred to as ‘change-oriented OCB’. This category of OCB takes into account employees’ suggestions for constructive changes in work methods, processes, and policies at workplace. Notably, the set of behaviors which are identified as change-oriented OCBs such as making and voicing suggestions tend to improve work performance, but are subject to disrupting social relationships because of the possible implications resulting from challenging the status quo of the workplace (LePine & Van Dyne, 1998).

In addition, several other taxonomies have been proposed in literature including similar or varied perspectives on citizenship behaviors such as spreading good will, making constructive suggestions, and protecting the organization (George & Brief, 1992), interpersonal facilitation and job dedication (Van Scotter & Motowidlo (1996),

organizational obedience and organizational participation (Graham, 1991), endorsing, supporting, and defending organizational objectives, following organizational rules and procedures, and persisting with enthusiasm and extra effort (Borman & Motowidlo, 1993). Interestingly, Organ's (1988) taxonomy of citizenship behaviors has been widely accepted, popular and much studied in literature reporting the greatest amount of empirical research (LePine et al., 2002). Therefore, the present study intends to focus on OCB in terms of altruism, courtesy, civic virtue, conscientiousness, and sportsmanship.

Chapter II

Review of Literature

The present chapter deals with the researches carried out concerning the constructs that have been taken up in the study. The review of the literature provides a global and wholesome view of the variables in the study and also presents before the readers the past and present scenario and future perspectives.

2.1 ORGANIZATIONAL CITIZENSHIP BEHAVIOR (OCB)

OCB has become a widespread component of organizational sciences; most notably, originated in the positive paradigms of organizational behavior, but is more recently being explored in almost every facet of management literature. This growth of interest is not surprising given the argument and emerging evidence that constructive and beneficial extra role gestures may uniquely contribute to the overall organizational effectiveness. A large body of literature affirms that OCBs have become progressively significant and even crucial for the survival of an organization (Mac Kenzie et al., 2011; Podsakoff & MacKenzie, 1997; Somech & Drach-Zahavy, 2012; Wei et al., 2010; Zhang et al., 2008).

To date, OCB research has witnessed a plethora of studies assessing and evaluating the antecedents, mediating variables, and outcomes of OCBs. A number of factors including employees' workplace attitudes, fairness perceptions, organization supportiveness, person-organization fit, personal dispositions, social context, task attributes, LMX, and organizational characteristics have been recognized as influential in the enactment of OCBs that in turn, have been advocated to exert a positive influence on the individual and organizational productivity. To organize the explored review findings related to the antecedents and consequences of this critical component of job performance, preceding variables have been apprehended under four sections: attitudinal factors, dispositional factors, motivational factors, and contextual factors and outcomes of OCBs have been understood under two sections: individual and organizational consequences of OCBs (see Figure 2.1) to emphasize the relevance of studying these behaviors in IT context in contemporary Indian business scenario.

The extant research on OCB has primarily examined the effects of dispositional factors on citizenship performance of employees. Most studies in this genre of OCB, using a wide

variety of samples, have shown that personality characteristics have a positive influence on OCBs (Kumar, Bakhshi, & Rani, 2009; Li, Liang, & Crant, 2010; Organ, 1994b). Consistent with this, Tan and Tan, (2008) predicted the influence of personality (Conscientiousness), motives, and contextual factors (task visibility, task interdependence, group cohesiveness, and felt responsibility) on OCBs.

Ilies et al., (2009) evaluated the impact of agreeableness and conscientiousness dimensions of personality on OCBs (OCB-I and OCB-O). Job satisfaction was examined for its mediating effect in the relationship between individual personality characteristics and OCBs. Both the personality dimensions had direct and indirect effects on over all OCB through job satisfaction. Agreeableness dimension was found to be more closely related with OCB-I and had both direct and indirect effects on OCB-I but only indirect effects on OCB-O. Conscientiousness was found to be more closely related with dimension with OCB-O and exhibited direct and indirect effects on OCB-O but only indirect effects on OCB-I.

Considering personality and impression management strategies in predicting OCBs, Chiaburu et al., (2013) emphasized on employees' impression management motives as a moderating variable in strengthening the relationship between extraversion and interpersonal citizenship. It was observed that an individual's strategy to get along served as an explanatory mechanism to the interactive effect of extraversion and impression management motives on interpersonal citizenship behaviour. The study suggested considering the conjoint influence of employees' extraversion and impression management motives in improving the citizenship behaviours.

Putting emphasis on a different personal attribute, Elanain (2010) examined the impact of personality characteristics (openness to experience) on OCBs, and the mediating impact of work locus of control (WLOC) and interactional justice on the OCB dimensions of interpersonal helping, individual initiative, personal industry, and loyal boosterism relationship. It was apparently suggested that employees who were high in openness to experience were more likely to be high in internal WLOC, which in turn extended their efforts in performing higher level of interpersonal helping, individual initiative, personal industry, and loyal boosterism. The study also revealed that subjects who were high in openness to experience were more likely to perceive interactional justice positively which in turn had a functional influence on OCB dimensions. Recently, Rosopa, Schroeder, and Hulett (2012) confirmed in their study that altruistic employees had more favorable personality characteristics and received

higher advancement potential ratings and greater reward recommendations than their less altruistic counterparts.

Beauregard (2012) also predicted the direct effects of adaptive perfectionism, self-efficacy and gender on OCBs. The existing research further pointed out that in promoting OCBs at workplace, along with the inherent traits of personality of the employees, work place attitudes and individual perceptions of the organizational attributes act as an activator. With this specific focus, Chiu and Tsai, (2006) tested the relationship between burnout and OCBs by examining the mediating mechanism of job involvement and concluded that subjects' job involvement mediated the relationships among emotional exhaustion, diminished personal accomplishment indicators of burnout and OCB.

Jain and Sinha (2006) found the impact of dimensions of self-management on the dimensions of in-role behaviors and citizenship behaviors. The study emphasized the importance of both cognitive as well as affective processes in carrying out the job effectively, and the possibilities associated with self-management behavior in organizations for cost-reduction and a substitute for external control mechanism.

In a similar direction, Somech and Ron, (2007) evaluated the influence of individual characteristics (positive affectivity, negative affectivity, and attitude), perceived organizational support, and organizational values of individualism versus collectivism on OCBs. Perceived supervisory support and collectivism were found to be positively related to OCB. Negative affectivity was found to be negatively related with OCB and positive affectivity did not have any impact upon OCB.

In recognizing the role of individual workplace attitudes on OCBs in a clear manner, Foote and Tang (2008) proposed to examine the impact of job satisfaction on OCBs while measuring the moderating role of team commitment. Results of the study suggested that the relationship between job satisfaction and organizational citizenship behavior was stronger when commitment was high in members of self-directed work teams.

Putting further an emphasis on the role of organizational characteristics and individual attitudes in predicting OCBs, Zheng, Zhang, and Li (2011) examined the impact of performance appraisal process on OCBs while evaluating the mediating role of affective commitment and moderating role of rating-reward linkage in the proposed relationship. PA process was found to be related with OCB both directly and indirectly through affective commitment and that rating-reward linkage strengthens the direct association between

performance appraisal process and OCB but weakens the relationship between performance appraisal process and affective commitment.

Allen, Evans and White (2011) revealed the role of individual disposition of equity sensitivity in explaining the nature of the relationship between affective organizational commitment and OCBs. The moderating effect of equity sensitivity was highlighted in this relationship to explain employees' with a state of inequity exhibit lower levels of OCBs regardless of whether affective commitment is low or high.

Biswas and Verma (2012) evaluated the influence of organizational commitment and culture on OCBs to explore its impact on in-role performance and intention to quit. It was suggested that organizational commitment motivates individuals to evince pro-social behaviours and with regard to organizational culture it was stated that culture essential determines individual's actions and behaviors and that by enforcing organizationally accepted conventions, culture prompts individuals to behave in a pro-social manner.

Sesen and Basim (2012) evaluated the impact of satisfaction and commitment on teachers' organizational citizenship behaviours and the results indicated a positive influence of job satisfaction and commitment on OCBs of the teachers and organizational commitment was found as mediating the relationship between job satisfaction and OCB.

Taking a different perspective, de Lara, (2008) proposed to examine the effects of person-organization fit (POF) on OCBs by exploring the mediating influence of anomic feelings (pessimistic feelings such as social detachment and little faith in human relations), which suggested that unfavorable POF will elicit employees' anomic feelings, which in turn will prompt them to reciprocate with decreased OCB.

In a similar vein, Moliner et al., (2008) evaluated the influence of organizational justice (distributive, procedural, interpersonal, and informational) on employees' extra role customer service (ERCS) while examining the intermediate role of well-being (low burnout and high engagement) at work. Interestingly, only procedural justice and interactional justice explained well-being at work (burnout/engagement) and only indirectly affected the performance of ERCS. And, work engagement was recognized as a significant mediator. Hemdi and Nasurdin (2007) found that out of procedural justice and distributive justice, only distributive justice relates positively to OCBs.

Whereas in a more recent study, Gupta and Singh (2013) found that out of the four dimensions of organizational justice (procedural, empowerment, interpersonal and

informational justice), empowerment justice and procedural justice most strongly relates to employee citizenship behaviours.

Singh and Srivastava (2009) investigated the impact of individual level determinants (interaction frequency, competence and consistency related to colleagues seniors and juniors) of interpersonal trust (trust on colleague and trust on supervisor) on the dimensions of OCB and found that both the dimensions of trust were positively related to altruism, courtesy, and sportsmanship, whereas conscientiousness and civic-virtue had positive association with trust on supervisor. Trust was also found to exert partial mediating effect on the relationship between individual level factors and organizational citizenship behavior.

Erkutlu (2011) revealed the ways to favor OCBs through organizational culture. In particular, the study examined relationships between organizational citizenship behaviors (OCBs) and justice perceptions (interactional, distributive, and procedural justice) while examining the moderating role of organizational culture (respect for people and team orientation) in this relationship. Team orientation dimension of organizational culture was found to moderate the positive relationship between all justice dimensions and OCBs whereas respect for people dimension, moderated only that of interactional justice and OCB relationship.

Garg, Rastogi, and Kataria (2013) also found a significant and positive relationship between organizational justice dimensions and OCBs. Exploring the influence of organizational justice and perceived psychological contract breach on OCBs, Chiang et al., (2013) predicted the mediating role of trust in explaining the impact of employees' perceptions of fair treatment on their voluntary behaviors.

Liang (2011) identified the role of work values (intrinsic work values and extrinsic work values) and burnout (emotional exhaustion, cynicism, and reduced personal accomplishment) in promoting OCBs (OCB-I and OCB-O) and further investigated the moderating impact of burnout on the relationships between work values and OCBs. Both work values and burnout were observed as significant factors in predicting OCBs and burnout was also suggested as a moderator which can decrease the predictions of the relationship between work values and OCBs.

Scholars have also viewed transformational leadership as a positive workplace practice which has the potential to affect employees' citizenship behaviours. Not only this particular style of leadership, but Muchiri, Cooksey, and Walumbwa (2012) predicted the role of social processes of leadership in affecting citizenship performance of employees.

Williams, Parker and Turner (2010) also predicted the effects of higher levels of self-management, transformational team leaders, and a higher level of proactive personality on team proactive performance and found that transformational leadership had a positive influence on team proactive performance and that this relationship is mediated by favourable interpersonal norms.

Interestingly, Somech and Drach-Zahavy (2012) reported that investing employee effort in OCBs may be a stressful experience for the employee. But, this effect was observed as weaker in conditions of higher leader support or participation in decision-making which represent important job resources to employees. Also, followers' attitude towards leader power was observed as positively related with OCB (Yeh & Hsiao, 2007). Salanova & Schaufeli (2008) found the impact of job resources on employees' proactive behaviour; also work engagement was observed as full mediator in this relationship.

Zacher and Jimmieson (2013) suggested OCBs as a behavioral outcome of employee effort which is related to sales productivity. It was found that transformational leadership positively enhanced OCBs but it was further observed that employees with a high learning goal orientation may compensate for low levels of transformational leadership with regard to OCB. Simply put, learning goal orientation significantly moderated the influence of transformational leadership on OCBs.

Evaluating the impact of individual dimensions of psychological climate in terms of feedback environment and role clarity on job performance (task performance and contextual performance), Whitaker, Dahling, and Levy (2007) predicted the role of supportive feedback environment, feedback seeking, and role clarity in enhancing contextual performance at workplace.

Janssen and Huang (2008) investigated the influence of team identification and individual differentiation on team members' citizenship behaviours and found that when individuals identified themselves more strongly with their team, they engaged in more citizenship behaviors toward other team members. Moreover, citizenship behavior is found to be a mediator that linked team identification to an individual's effectiveness as a team member. However, OCBs were found to be unrelated to the extent to which individuals felt differentiated and distinct from other team members.

Bogler and Somech (2005) examined the influence of employees' participation in decision making on their organizational citizenship behaviours, and the impact of employee empowerment, as a mediating variable, on this relationship. The results revealed that

participation in decision making (PDM) had direct effects on OCBs. Also, employee empowerment played an important role in mediating the relationship between employees' PDM and OCB.

Chiang and Hsieh (2012) evaluated the impact of indicated perceived organizational support and psychological empowerment on OCB and the effects of OCB on the job performance. Both perceived organizational support and psychological empowerment were found to be positively related with OCB and OCB was found to be significantly related to job performance. It was further determined that OCB acted as partial as mediator in the relationship between psychological empowerment and perceived organizational support and OCB.

Shukla and Singh (2013) evaluated the role of psychological capital and job satisfaction on OCBs and found that job satisfaction fully mediates the impact of psychological capital on OCBs.

In the field of human resource management, Pare and Tremblay (2007) established OCBs as an outcome of employees' perceptions of high-involvement HR practices (recognition, empowerment, fair rewards, competence development, and information-sharing) as mediated by affective commitment and procedural fairness. However, the study failed to establish OCBs as a direct outcome of high-involvement HR practices.

Similarly, Wei et al., (2010) reported in their study that high-performance HR practices do not influence OCBs. Whereas psychological climate perceptions and individuals' job satisfaction was found to have a significant relationship with OCBs in that job satisfaction mediated this relationship.

On the contrary to these findings, Biswas, Srivastva, and Giri (2007) found a direct association between HR practices and OCBs which was further established as having positive impact upon employees' level of job involvement and satisfaction leading to enhanced organizational effectiveness. With respect to the availability of job resources at workplace, employees are expected to and may feel motivated to demonstrate positive workplace behaviours.

Further addressing the increasing role of human resource managers in promoting OCBs at work, Ganesh and Gupta (2010) found that task interdependence had a significant influence on employees' extra role performance (altruism, courtesy, general compliance, and civic-virtue) within software development teams. However, irrespective of task interdependence,

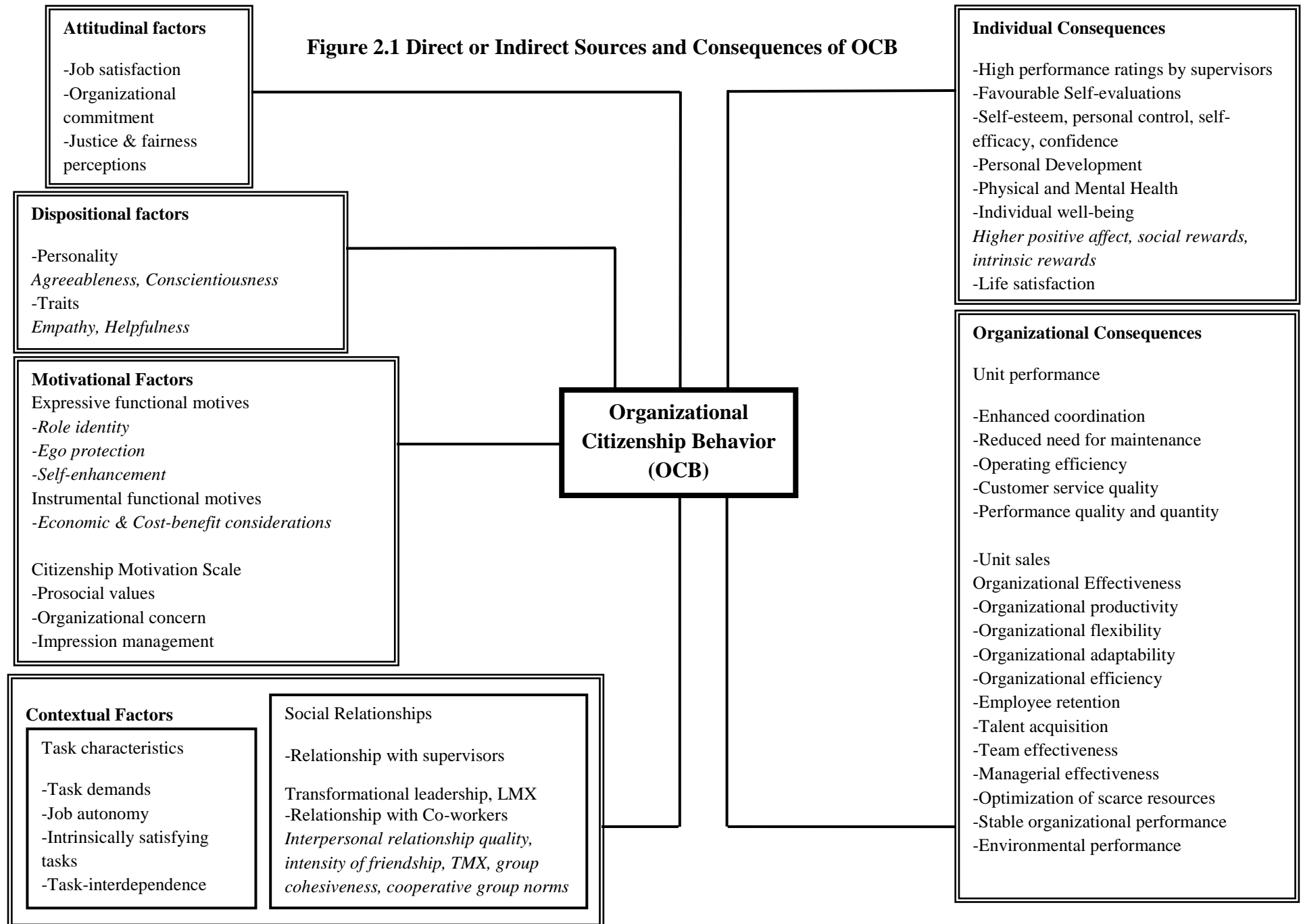
virtualness (physical dispersion and technology mediated communication) was found to have negative effect on OCB.

Shantz et al., (2013) revealed that employees, who hold jobs that offer high levels of autonomy, task variety, task significance and feedback are more highly engaged and, in consequence, receive higher performance ratings from their supervisors, enact more organizational citizenship behaviours.

More recently, Yeh (2013) evaluated the effects of psychological contract (transactional and relational) on OCBs as moderated by employees' perceptions fairness of performance appraisal. Both psychological contract fulfillment and fairness perceptions were found to yield significant effect on OCB. But the study failed to find support for the moderating effects of fairness perception in the relationship between psychological contact and OCBs as fairness perception was found to have effects on psychological contract and OCB independently, rather than serving as a moderator.

Based on a collective review of 67 international research studies, Figure 2.1 highlights the possible direct or indirect antecedents and consequences of OCBs. Although, the studies undertaken to review are having different locations, samples, times etc., but the theoretical underpinning and the findings are more or less similar in terms of its antecedents and outcomes. It can be clearly seen in Figure 2.1 that OCB is influenced by so many factors and also that it leads to plethora of positive individual and organizational outcomes.

Figure 2.1 Direct or Indirect Sources and Consequences of OCB



Though existing OCB research has acknowledged a number of antecedents to employees' increased contribution at work, yet in the light of varying business conditions, changing individual life-styles, altering employee perceptions of well-being at work, and transformations taken place in the adoption of workplace practices, an improved understanding of the organizational capabilities and individual attributes that can enhance the citizenship performance of employees becomes necessary for three reasons:

1. With the recognition, role of human resource managers can be extended to enhance employees' citizenship performance; recent OCB researches have expanded the scope of investigation and begun to identify specific HR practices as an important precursor of this desirable workplace behavior (Tang & Tang, 2012, Yang, 2012; Kohoe & Wright, 2013). Much of this research has been conducted in western nations. Relatively little is known about the impact of HRM on employee performance in Asian countries (Wickramasinghe & Gamage, 2011), and this is especially so in relation to India.

2. The role of employees' perceptions of workplace attributes in terms of just and fairness has been well understood by researchers, but employees' perceptions of the other aspects of the work climate (autonomy, feedback, challenge, support and role clarity etc.) have received very less attention in previous researches (Wei et al., 2010), which may have psychological implications for both.

3. Further, given the glaring functions of employee well-being at work, contemporary scholars have also been putting their efforts to examine work engagement as an important precursor of OCBs (Runhaar et al., 2013; Shantz et al., 2013). Work engagement has recently been advocated as a critical psychological state of well-being. The argument behind this stream of research is that engagement is an enhanced state of thinking and acting in ways that bring both personal fulfillment and positive contributions to the organization (Catsouphe & Costa, 2008), in terms of OCBs.

Thus, an improved understanding of this upcoming stream of OCB research in Indian IT organizations may have both theoretical and practical implications for managers, practitioners, and human resource professionals. In the light of facts discussed above, the current research reviews the relevant literature pertaining to the role of high-performance HR practices, psychological climate, and work engagement in facilitating employees' citizenship behaviours.

2.2 HIGH-PERFORMANCE HR PRACTICES

The basic premise behind the concept of high-performance HR practices is that some HR practices can increase the value of the human capital and that these HR practices can lead to desirable organizational outcomes by increasing employee competencies. Thus, these practices are termed as ‘high-performance HR practices (Wei et al., 2010). In specific, high-performance HR practices have been envisaged as a set of coherent HR practices (for e.g. selective staffing, extensive training, employee participation in decision making, employment security, empowerment, career planning and development opportunities, performance based compensation etc.) that place a greater value to firm’s human capital and focus on the development of employees’ competence, performance, and motivation to encourage them execute their duties in ways that benefit the organization. Buller and McEvoy (2012) also argued that some HRM practices can positively affect firm performance, primarily through their impacts on human and social capital, both of which are necessary to achieve and sustain superior performance. Recent research has also shown empirically that HR practices are related to employee performance through human capital (ability), psychological empowerment (motivation) and perceived organizational support (opportunity), which in turn influence performance (Liao, Toya, Lepak & Hong 2009).

Based on the similar notion, a variety of other terms have also been used in the HR practices literature such as emerging HR practices, high-involvement HR practices, high-involvement work systems, performance-enhancing/ progressive HRM practices, high-performance work systems, innovative human resource management (HRM) practices, high performance management systems (HPMSs) to emphasize employee empowerment and progressive practices designed to enhance organizational performance.

The past two decades have seen an upsurge in the pace of high-performance HR practices research, as indicated in the growing number of peer-reviewed publications in the area (Refer Table 2.1). A robust body of research asserts that strategic human resource management specifically its implementation through high-performance HR practices has a significant influence on organizational performance and effectiveness. For instance, Tan and Nasuridin (2011) suggest that HRM practices may have a positive influence on knowledge management effectiveness and organizational innovation. Murphy and Murrmann (2009) suggest that when organizations place a higher value on their employees, through the implementation of high performance management systems (HPMSs), their business performance improves. For instance, Wickramasinghe and Gamage, (2011) recently predicted the role of high-involvement

work practices in quality results. Thus, the consensus in the extant literature is that a firm's adoption of high-performance HR practices is related to firm performance (Sun & Pan, 2011).

HR practices research from the strategic perspective has begun to examine the intermediaries of high-performance HR practices-effectiveness linkage (Alfes et al., 2012). Focusing on the transition of HRM practices and policies in Indian organizations, Biswas, Giri, and Srivastava (2006) found that HR practices positively relate to employees' in-role and extra-role performance and to organizational effectiveness.

Following this, Sun et al., (2007) examined the impact of high-performance HR practices on two performance indicators (productivity and turnover) and the mediating role of service-oriented OCBs in the proposed relationship. High-performance HR practices were found to be conducive to organizational performance indicators directly and indirectly through service-oriented OCBs. Zhang et al., (2008) tested the impact of high-performance HR practices on corporate entrepreneurship (CE) through their influence on OCBs, high-performance HR practices were found to be positively related to CE and that OCBs were found to exert a positive influence in establishing the underlying conditions for high-performance HR practices. Thus, the mediating effect of OCBs was confirmed in the proposed relationship. Whereas, Sun and Pan (2011) investigated the employee-organization interactive process in that the role of high-performance HR practices on firm performance was found to be contingent upon employee commitment.

Messersmith, Patel, and Lepak (2011) also predicted the role of critical black-box elements (job satisfaction, organizational commitment, and psychological empowerment, OCB) in the relationship between HPWS and organizational performance outcomes. There is much evidence in existing literature that HR practices are related to employee attitudes (job satisfaction and organizational commitment) at workplace (Guest 2002, 2007; Lepak, Wang and Takeuchi 2007; Macky & Boxall, 2008; Nasurdin, Hemdi, & Guat, 2008). Edralin (2008) investigated the impact of innovative human resource management (HRM) practices on employee job involvement and organizational commitment. It was found that innovative HRM practices related to employee relations, training and development, and recruitment and selection significantly determined subjects' job involvement. While examining the effects of training on employees organizational commitment, Bartlett (2001) found that perceived access to training, social support for training, motivation to learn, and perceived benefits of training are positively related to affective form organizational commitment and that this relationship is moderated by job satisfaction. On the other hand, innovative HRM practices related to

employee relations, recruitment and selection, performance management, and compensation significantly influenced employees' organizational commitment.

Wu and Chaturvedi (2009) tested the impact of HPWS on employee attitudes (affective commitment and job satisfaction) while examining the mediating role of procedural justice and the moderating role of power distance in this relationship. Based on the social exchange phenomenon, the relationship between HPWS, employee attitudes, and perception of fairness was confirmed. Also, procedural justice was observed as having partially mediating influence in the relationship between HPWS and employee attitudes. However, the positive relationship between HPWS and attitudes was not observed as contingent on power distance values prevalent within the organization.

More recently, an increasing number of scholars in the field of human resource management have been putting up their efforts to explore comprehensively the role of high-performance HR practices on employees' citizenship behaviours. For example, Boselie (2010) explored the effect of high performance work practices (that enhance abilities, motivation, and opportunities) on commitment and citizenship behavior. The results of the study suggested that only ability enhancing high performance work practices (e.g. skills training, general training, and task enrichment) positively affect affective commitment and high performance work practices HPWPs that enhance opportunities (e.g. job autonomy, participation in decision making) positively affect organizational citizenship behavior.

It is apparent from the above review of literature; OCBs have been recognized as significant mediating variable in the high-performance HR practices-organizational effectiveness linkage. Only recently, there has been increased emphasis on examining the possibility of indirect relationship between high-performance HR practices-OCB. Contemporary scholars in the field of human resource management have been trying their efforts in investigating the high-performance HR practices and OCBs relationship in an exact manner by empirically examining the role of employee attitudes, perceptions of justice, and working climates in this relationship.

Using a collective social exchange approach, Gong, Chang, and Cheung (2010) found that high performance work system works well through HR practices (selective hiring, participation in decision making through teams, comparatively high pay contingent on firm performance, extensive training, career planning, and advancement and regular performance appraisals) to enhance collective OCB through its influence on collective affective commitment of employees.

Frenkel, Restubog, and Bednall (2012) examined the impact of employee perceptions of HR policies and practices (participation in decision-making, fair rewards and development opportunities) on procedural and distributive justice, organizational identification, and OCB (discretionary work effort and co-worker assistance) and found that HR practices are positively related to procedural and distributive justice and that organizational identification mediates the relationship between procedural and distributive justice and OCB.

Similarly, Tang and Tang (2012) examines the influence of high-performance human resource (HR) practices on service-oriented organizational citizenship behavior (OCB) and the mediating influence of justice and service climate. The study reported a positive relationship between high-performance HR practices on service-oriented OCB and that social climate of justice and service mediated this relationship.

Yang (2012) examined how high-involvement HR practices (recognition, empowerment, competence development, fair rewards, and information sharing) influenced contact employees' citizenship behaviors in service settings through their impact on affective commitment. The relationship between high involvement HR practices and contact employees' citizenship behaviors was found to be positive. Also, the role of affective commitment was observed to be an effective linkage between high involvement HR practices and contact employees' citizenship behaviors.

Hussain and Mujtaba (2013) viewed human resource as a capital investment and evaluated the impact of HR practices (job autonomy, leadership behavior, and team building) on employees' job satisfaction. HR practices were observed a having a positive influence on job satisfaction. It was suggested that committed and devoted employees are the key of success to any organization; these committed employees can remain loyal if they are satisfied with their jobs.

To conclude, previous high-performance HR practices research has underscored that organizations may have much difference in terms of HR policy and practices implementation and that this difference might cause variations in organizational capacity to achieve organizational goals and to sustain organizational performance depending upon the attitudes and behaviors of employees, which are also affected by the way an organization manages its human capital and determines its performance. One important revelation of the literature review was that the employees' citizenship behaviors remained at the focal point of most of the recent high-performance HR practices researches and individual work attitudes (affective organizational commitment) and justice perceptions were also given due consideration. There is

recent trend in high-performance HR literature investigating the intermediaries in the relationship between high-performance HR practices and employee attitudes and behaviours. The critical review unfolds that much of the work examining the relationship between high-performance HR practices and OCBs approximately equally relied on employee attitudes, the impact of other variables pertaining to employees' perceptions of their work climate, trust, organizational support, empowerment, LMX, and work engagement require more elucidation. Considering the objectives of present study, Table 2.1 depicts the summary of previous research studies with a major focus on the behavioral outcomes of high-performance HR practices.

Table 2.1 Summary of Previous Studies on High-Performance HR Practices

Source/Study	Sample, setting and study type	Concept attributes	Consequences (C)	Configuration of HR practices	Findings	Explanatory framework
<p>Paré and Tremblay (2007)</p> <p>Objective-Examining the mediation effects of procedural justice, organizational commitment, and OCBs in the relationship between high-involvement HR practices and turnover intentions.</p> <p>Methodology- structural equation modeling</p>	<p>394 Canadian highly skilled professionals (IT) employees Cross-sectional</p>	<p>Multidimensional</p> <p>Representative of organizational actions towards employees</p> <p>May act as reinforcement to employees' beliefs about the organization</p> <p>A set of HR practices that enhance employees' high-involvement with work and boost employees' sense of self worth</p>	<p>[C] Employee Retention</p> <p>[C] Role Behaviours</p> <p>[C] Procedural Justice</p> <p>[C] OCBs</p> <p>[C] Affective Commitment</p> <p>[C] Continuance Commitment</p> <p>[C] Competitive Advantage</p>	<ol style="list-style-type: none"> 1. Empowerment 2. Competence Development Practices 3. Information-Sharing Practices 4. Recognition 5. Fair Organizational Rewards 	<p>Partial mediation of Procedural justice, affective and continuance commitment, and OCBs in the relationship between high involvement HR practices and turnover intentions was confirmed.</p>	<p>High-involvement HR Practices</p>
<p>Sun, Aryee, and Law (2007)</p> <p>Objective- Mediating influence of service-oriented OCB on the relationship between HPHR practices and organizational performance</p> <p>Methodology- Cross-level analysis</p>	<p>Hotels located in 12 cities in an eastern coastal province of the People's Republic of China.</p> <p>Multiple sources of data collection- 86 human resource managers for their perceptions of HRM practices and perceptions of 430 supervisors for their subordinates' OCB from 86 hotels in China</p>	<p>coherent practices that enhance the skills of the workforce, participation in decision making, and motivation to put forth discretionary or spontaneous efforts</p>	<p>[C] Service-oriented OCB</p> <p>[C] Low Turnover</p> <p>[C] High-productivity</p>	<ol style="list-style-type: none"> 1. Selective Staffing 2. Extensive Training 3. Internal Mobility 4. Employment Security 5. Clear Job Description 6. Result-Oriented Appraisal 7. Incentive Reward 8. Participation 	<p>Partial mediation of service oriented OCB in the relationship between high performance HR practices and turnover and productivity was confirmed.</p>	<p>High-performance HR Practices</p>

<p>Zhang, Wan, and Jia (2008)</p> <p>Objective- Mediating analysis of OCB between High-performance HR practices and CE.</p> <p>Methodology- Multiple Regression Analysis</p>	<p>139 Chinese SMEs biotechnology firms</p> <p>Multiple sources of data collection- 139 CEOs, HR managers, and 695 supervisors</p>	<p>A set of coherent practices focusing on people flow, appraisal and rewards, and employment relations</p> <p>An organizational inducement</p> <p>Mutual investment approach to the employee-organization relationship Aim at continuous improvement of the employees' performance</p>	<p>[C] OCB [C] Sustainable competitive advantage [C] Corporate entrepreneurship [C] Employee commitment</p>	<ol style="list-style-type: none"> 1. Selective Staffing, 2. Extensive Training, 3. Internal Mobility, 4. Employment Security, 5. Clear Job Description, 6. Result-Oriented Appraisal, 7. Incentive Reward, 8. And Participation 	<p>High-performance human resource practices are positively related to OCB and CE.</p> <p>OCB mediates the impact of high-performance human resource practices on CE.</p>	<p>High-performance HR Practices</p>
<p>Zhang and Agarwal, (2009)</p> <p>Objective- examines the mediating effects of organizational justice in predicting OCB and turnover intention from HR practices.</p> <p>Methodology- structural equation modelling (SEM)</p>	<p>242 supervisor-subordinate dyads from Chinese organizations</p>	<p>A set of practices which provide organizations with a source of sustained competitive advantage</p>	<p>[C] justice perceptions [C] OCBs [C] Lower turnover intentions</p>	<ol style="list-style-type: none"> 1. Employee empowerment 2. Organizational communication 3. Psychological contracts 	<p>Employees who perceived higher levels of organizational justice tended to feel obligated to demonstrate higher levels of OCB, and employees who perceived higher levels of distributive and interactional justice reported lower levels of turnover intention.</p>	<p>Emerging HR practices</p>
<p>Wu and Chaturvedi, (2009)</p> <p>Objective- Mediating analysis of procedural justice in the relationship between HPWS and employee attitudes (JS & AC)</p> <p>Methodology- Hierarchical Linear Modeling</p>	<p>1,383 employees from china, Singapore, and Taiwan</p>	<p>HPWS in an organization referred to a set of best practices</p>	<p>[C] job satisfaction [C] affective commitment [C] perception of fairness procedures</p>	<ol style="list-style-type: none"> 1. Selectivity 2. comprehensive training 3. internal career opportunities 4. formal appraisals 5. empowerment 6. performance-related pay 	<p>Procedural Justice partially mediates the relationship between HPWS and job satisfaction</p> <p>Procedural Justice fully mediates the relationship between HPWS and affective commitment</p>	<p>High-performance work systems (HPWS)</p>

<p>Boselie, (2010)</p> <p>Objective-Examining the effect of high performance work practices on commitment and citizenship behaviour in the health care sector.</p> <p>Methodology- Regression Analysis</p>	<p>157 employees from a large general hospital in Holland</p>	<p>Practices that enhance abilities, motivation, and opportunities to perform.</p> <p>HPWSs has the effect of making workers feel highly committed to their organization, their department, their colleagues and their job, and are willing to go the extra mile.</p>	<p>[C]Employee attitudes [C]Employee behaviors [C] Organizational efficiency, flexibility and legitimacy</p>	<ol style="list-style-type: none"> 1. Ability Enhancing HR Practices (skills, training, job enrichment, and coaching) 2. Motivation Enhancing HR Practices (high wages, fair pay and pay for performance) 3. Opportunity Enhancing HR Practices (e.g. autonomy, employee involvement in decision making) 	<p>High scores on perceived HPWPs that enhance abilities are positively related to high affective commitment and high scores on perceived HPWPs that enhance opportunities to participate are positively related to high OCB.</p>	<p>High Performance Work Practices (HPWPs)</p> <p>Specific HR Practices</p>
<p>Snape and Redman, (2010)</p> <p>Objective- Mediating analysis of perceived organizational support and perceived job influence in the relationship between HRM practices and compliance, altruism and In-role behaviour.</p> <p>Methodology- HLM analysis</p>	<p>519 employees from manufacturing, public and private services, and small companies.</p>	<p>a formal integrated system of HR activities</p>	<p>[C] Compliance And Altruism [C] Perceived Job Influence/Discretion [C]Perceived Organizational Support [C] In- Role Behaviour</p>	<ol style="list-style-type: none"> 1. Development (employee training, appraisal, involvement, and internal career development.) 2. Selection 3. Rewards 4. Internal Labour Market 	<p>The relationship between HRM and employee behaviour was not found to be mediated by perceived organizational support.</p> <p>Only perceived job influence mediated the impact of HRM practices on compliance and altruism.</p>	<p>HRM practices</p> <p>High-performance work system</p>

<p>Tremblay, Cloutier, Simard, Chênevert, and Vandenberghe, (2010)</p> <p>Objective- To test a model linking HRM practices to in-role and extra-role behaviors, as well as to evaluate the mediating influence of PJ, POS, trust and AOC</p> <p>Methodology- SEM</p>	<p>1,219 employees from Canadian hospital</p>	<p>HRM practices can be hard or soft</p> <p>soft HR practices are more likely to signal to employees that the organization values their recognition, treats them fairly, supports them and trusts them.</p>	<p>[C] Perception of organizational support (POS) [C] Perception of procedural justice (PJ) [C] Trust in the organization [C] Affective organizational commitment (AOC) [C] In-role and extra-role behaviors</p>	<ol style="list-style-type: none"> 1. 'top down' and 'bottom up' information sharing 2. skills development 3. feedback on performance 4. non-monetary rewards 	<p>There is no direct links Between HRM practices and in-role and extra-role performance</p> <p>HRM practices can stimulate greater in-role and extra-role performance if they are perceived as signs of support and procedural justice</p>	<p>HRM practices</p> <p>Soft HR Practices</p>
<p>Wei, Han, and Hsu, (2010)</p> <p>Objective- Effect of HPHR practices on psychological climate, job satisfaction, and OCBs</p> <p>Methodology- Multi-level approach</p>	<p>Single-industry approach 11 Taiwanese electronic appliances manufacturing plants</p> <p>Multiple sources of data collection-HR managers from each plant for their perceptions of HRM practices. And, For PC, JS, and OCB-576 employees</p>	<p>Consists of a set of policies and practices including employment security, selective staffing, and employee participation in decision-making, incentive compensation systems, extensive training, and career development activities.</p>	<p>[C] Psychological climate [C] Job satisfaction [C] OCBs</p>	<ol style="list-style-type: none"> 1. Internal career opportunities 2. Extensive training 3. Employment security 4. Participation and communication 5. Sensitive selection 6. incentive compensation 	<p>Job satisfaction mediates the relationship between psychological climate perceptions and OCB at the individual level.</p> <p>At the plant level, positive and significant relationship between High-performance HR practices and only job satisfaction.</p>	<p>High-performance HR Practices</p>
<p>Gong, Chang, and Cheung, (2010)</p> <p>Objective- Examining collective AC as a mediator between HPWS and collective OCB.</p> <p>Methodology- structural equation modelling (SEM)</p>	<p>senior managers, HR and middle managers from 454 firms in China</p>	<p>a system of HR practices designed to enhance employees' skills, commitment, and productivity comprising multiple and mutually reinforcing HR practices an organisation's investment in, recognition of and support for middle managers</p>	<p>[C] Collective affective commitment [C] Collective OCB</p>	<ol style="list-style-type: none"> 1. Selective hiring 2. Extensive training 3. Career planning and advancement 4. Regular performance appraisal 5. Participation in decision making 	<p>Collective AC partially mediates the impact of HPWS on collective OCB.</p>	<p>High - performance work system (HPWS)</p>

<p>Messersmith, Patel, and Lepak, (2011)</p> <p>Objective- explores job satisfaction, organizational commitment, and employee empowerment as mediators between HPWS and OCB. Also, analyzes the mediating path of OCB in the relationship between HPWS and unit performance.</p> <p>Methodology- structural equation modelling (SEM)</p>	<p>1,372 Welsh public-sector employees from 119 service departments</p> <p>a multi-informant and multi-source study (employees, managers, and the Welsh Assembly Government)</p>	<p>A group of coherent HR practices designed to enhance employees' skills and effort.</p>	<p>[C] Job Satisfaction [C] Organizational Commitment [C] Employee Empowerment [C] OCBs</p>	<ol style="list-style-type: none"> 1. Recruitment and selection 2. Pay for performance 3. Information sharing 4. Rigorous performance appraisal 5. Training 6. Flexible work arrangements and family-friendly policies 	<p>Positive relationship was found among all the study variables. OCB partially mediated the influence of HPWS on departmental performance.</p> <p>Employee attitudes may partially mediate the relationship of HPWS with discretionary employee behaviors.</p>	<p>HPWS</p> <p>High-performance work practices</p>
<p>Alfes, Shantz, Truss, and Soane (2012)</p> <p>Objective- Linking perceived HRM practices to OCB and turnover intentions through employee engagement, LMX, and POS.</p> <p>Methodology- Hierarchical Multiple Regression Analysis</p>	<p>297 employees from a service sector organization in the UK</p>	<p>Create synergistic effects when considered holistically</p> <p>Signal long term investment in employees</p> <p>Designed to empower employees in their daily work</p> <p>Employees' perceptions of HR practices is important- a growing concern Impact upon individual behaviors Can lead to higher effectiveness</p>	<p>[C] Employee Engagement [C] OCB [C] Organizational commitment [C] POS [C] job satisfaction [C] Lower turnover intentions</p>	<p>Merely measured the employees' perceptions of HRM practices in the organization using (statements relating to the HR practices).</p>	<p>Employee engagement mediates the relationship between perceived HRM practices and OCB and turnover intentions.</p> <p>POS and LMX moderates the link between engagement and these outcome variables.</p>	<p>HRM Interventions</p> <p>HRM Practices</p> <p>HRM Bundles</p>

<p>Frenkel, Restubog, and Bednall, (2012)</p> <p>Objective- examines the relationship between employees' perceptions of HR policy and practices and two forms of OCB- discretionary work effort (DWE) and coworker assistance (CWA) through the mechanisms of organizational justice and organizational identification.</p> <p>Methodology- structural equation modelling (SEM)</p>	<p>618 full-time employees in two organizations</p> <p>(alcoholic beverage firm and a telecommunications company)</p>	<p>HR practices</p>	<p>[C] Justice perceptions</p> <p>[C] Organizational identification</p> <p>[C] Discretionary work effort (DWE)</p> <p>[C] Coworker assistance (CWA)</p>	<p>Perceived strength of HR policy and practice</p>	<p>HR practices are positively related to procedural and distributive justice and that organizational identification mediates the relationship between procedural and distributive justice and DWE and CWA, respectively.</p> <p>Distributive justice is also shown to have direct effects on DWE and CWA.</p>	<p>HR policy and practice</p> <p>HPWS</p>
<p>Karatepe (2013)</p> <p>Objective- Mediating analysis of work engagement in the effects of HPWPs on job performance and extra role customer service.</p> <p>Methodology- structural equation modeling (SEM).</p>	<p>110 employees and managers in Romania</p> <p>Multisource method</p>	<p>A set of human resource practices</p> <p>Most important indicators of management commitment</p> <p>A second-order latent variable that is manifested by different HR practices</p>	<p>[C] Work engagement</p> <p>[C] Extra-role performance</p> <p>[C] Employee performance</p> <p>[C] organizational performance</p>	<ol style="list-style-type: none"> 1. Training 2. Empowerment 3. Rewards 	<p>Work engagement acts as a full mediator of the effects of HPWPs on job performance and extra-role customer service.</p>	<p>High-Performance Work Practices (HPWPs)</p> <p>Effective human resource practices</p>

<p>Tang and Tang, (2012)</p> <p>Objective- Examines the influence of HPHR practices on service-oriented organizational citizenship behavior (OCB) through justice climate and service climate.</p> <p>Methodology- structural equation modelling (SEM)</p>	<p>Multi source method of data collection, 119 HR managers from different hotels in Taiwan, 1133 customer contact employees</p>	<p>a system of HR practices that complement with each other and enhance employee performance.</p>	<p>[C] positive perceptions of organizational social climates- justice climate and service climate [C] service-oriented OCBs</p>	<ol style="list-style-type: none"> 1. Selection policy 2. Training 3. Performance appraisal 4. Compensation 5. Participation 6. Empowerment 	<p>The impact of HPHR on service-oriented OCB was found to be transmitted through justice and service climate.</p>	<p>Service-oriented high-performance HR practices</p>
<p>Yang, (2012)</p> <p>Objective- mediating analysis of AC in the relationship between HIHR practices and service-oriented OCBs</p> <p>Methodology- structural equation modelling (SEM)</p>	<p>172 frontline restaurant employees in Taiwan's restaurants</p>	<p>High-involvement practices are management approaches centered on employee involvement.</p> <p>Viewed as the main engine behind the evolution of contemporary strategic HR management.</p>	<p>[C] Affective commitment [C] Service-oriented OCBs</p>	<ol style="list-style-type: none"> 1. Empowerment 2. Competence Development 3. Information Sharing, 4. Recognition 5. Fair Reward 	<p>Indicates the mediating role of affective commitment between high-involvement HR practices and OCBs.</p>	<p>High-involvement HR practices</p>

<p>Baluch, Salge and Piening, (2013)</p> <p>Objective- Mediating analysis of job efficacy, intention to leave, and civility towards patients through which employees' perceptions of HR systems are related to patient satisfaction (an indicator of organizational performance)</p> <p>Methodology- structural equation modelling (SEM)</p>	<p>a multi-informant and multi-source study</p> <p>400 individual staff responses, 420 patient responses</p>	<p>HR practices such as training, performance appraisal and involvement in decision making, bundled together into an internally consistent HR system, can have a positive impact on hospital performance.</p>	<p>[C] employees' job efficacy</p> <p>[C] intention to leave</p> <p>[C] civility towards patients (treating others with courtesy, dignity and respect)</p>	<ol style="list-style-type: none"> 1. Involvement 2. Communication 3. Supervisor Support 4. Performance Appraisal 5. Personnel Development 	<p>The link between employees' HR system perceptions and civility towards patients is fully mediated by employees' intention to leave, and not mediated by employees' job efficacy.</p> <p>Employees' civility towards patients mediates the relationship between employees' HR system perceptions and patient satisfaction.</p>	<p>HR system</p>
<p>Kehoe and Wright, (2013)</p> <p>Objective- Examining the mediating effects of affective commitment on the role of HPHR practices on absenteeism, intent to remain with the organization, and OCB.</p> <p>Methodology- multilevel mediation analysis.</p>	<p>employees at a large multiunit food service organization</p>	<p>a mutual investment based employment relationship</p>	<p>[C] Affective Commitment</p> <p>[C] OCBs</p> <p>[C] Lower turnover intentions</p> <p>[C] Lower absenteeism</p>	<ol style="list-style-type: none"> 1. Ability-enhancing practices 2. Motivation-enhancing practices 3. Opportunity-enhancing practices 	<p>AOC was found to influence the relationship between employees' perceptions of HR practices and OCB in part. AOC fully mediated the impact of HR practices and employees' intent to remain with the organization.</p>	<p>Performance- and commitment-oriented human resource (HR) practices</p> <p>High-performance HR system</p>

2.2.1 High-Performance HR Practices and OCB

A majority of research has focused upon the role of high-performance HR practices in influencing employees' workplace behaviours. Also, it has been previously recognized that organizations can enhance employees' increased contributions at workplace through HR initiatives (Chuang & Liao, 2010). While reviewing the existing research studies which aimed at exploring the relationship between high-performance HR practices and OCBs, it has been observed that strategic implementation of the employee focused HR practices may serve as a critical constituent of organizational processes creating value for the organizations in that these practices may act as an integrative force in organizations, determining its performance, sustainability, and also employees' citizenship performance.

In fact, large investments in HR practices such as sensitive selection, training and development signal to employees that they are the competitive strength of the company (Fiorito, Bozeman, & Young, 1997; Pare & Tremblay, 2007) which may then be reciprocated by them with an enhanced level of personal contribution and efforts towards organizational goals (Pare & Tremblay, 2007; Tsui et al., 1997).

Unlike traditional HR practices that focus more on control and monitoring, high-performance HR practices encourage employees to develop their skills, information, latitude, commitment, and motivation (Wei et al., 2010) in order to reach high-performance levels. In so doing, high-performance HR practices facilitate the process of developing a kind of high-quality exchange relationship between employees and the organizations that is needed for employees to assume the role of good organizational agents (Leana & van Buren, 1999; Pare & Tremblay, 2007; Zhang et al., 2008).

Previous studies evaluating the outcomes of HR interventions have largely relied on the strategic-level intentions (HR practice ratings by managers) rather than accounting for the employees' actual experiences with the micro-level HR interventions. But, there may be a disconnection between what managers and company representatives say they do as formal HR practices and what individual employees actually experience (Liao et al., 2009). Research needs to focus on the actual processes experienced by workers in order to understand their significance for organizational outcomes (Alfes et al., 2012). To address recent calls in the literature for an investigation of this

nature, this study relies on the employee perceptions of the high-performance HR practices in their organizations to understand and assess their impact on OCBs.

2.3 PSYCHOLOGICAL CLIMATE

Barkhi and Kao, (2011) describe psychological climate as, “a set of perceptions that describe how an individual cognitively appraises the environment, based on personal experience” (p.125). This implies, psychological climate is one dynamic individual process that signifies the meaning and significance of work contexts for employees and that positive appraisal by the employees about the degree to which work environment is beneficial to the sheer sense of psychological well-being may provide guidance for their work behaviours and consequently, act as a valuable source for organizational effectiveness.

Of direct relevance to the current study, literature review pertaining to the psychological climate variable can be imitated with a significant finding in the previous literature which signifies that a favourable psychological climate nurtures positive attitudes and behaviors at workplace and thus positively influence employee performance. It has also been recognized that employees’ perceptions of intra-individual conflict (role conflict, goal conflict, and frustration) are largely determined by the factors of work climate (Suliman & Abdulla, 2005). Organizational work settings provide employees’ organizational support which has been found to relate with managerial effectiveness (Srivastava & Sinha, 2009).

Recently, Hassan and Rohrbaugh (2011) examined the influence of proximal work environment attributes in terms of role stress, lack of harmony, challenge, autonomy, leadership facilitation, support, and social environment characteristics on employees’ affective commitment in public sector enterprises and found a positive relationship.

Notably, the meta-analytic study on psychological climate by Parker et al. (2003) concluded the positive relationships between psychological climate perceptions and employees’ work attitudes, psychological well-being, motivation, and performance. Further, employee’ work attitudes (job satisfaction, involvement, and commitment) were observed as fully mediating the relationship between psychological climate perceptions and employee motivation and performance. While focusing on climate for innovation, Bose and Agarawal (2003) found that positive work environment fosters psychological contract fulfilment among employees.

Schulte, Ostroff, and Kinicki (2006) evaluated the relative importance of organizational climate and psychological climate on individual satisfaction. Results indicated both the climates have significant influence on individual satisfaction, but individuals' perceptions of the climate resulted in large amount of variance in individuals' satisfaction suggesting the significance of psychological climate over unit-level perceptions of overall climate.

Following this, Biswas and Verma, (2007) empirically evaluated the impact of psychological climate on OCBs and employees' job satisfaction level, and further examined the influence of OCBs and job satisfaction on employee performance. Psychological climate was observed as having positive impact on both employees' willingness to engage in OCBs, as well as on their job satisfaction levels, both of them had a significant impact on individuals' performance. Related to this, King et al., (2010) also predicted that the perceptions of work environments were associated with helping behaviors among women employees.

In an effort to further explain the relationship between psychological climate and work attitudes, O'Neill and Arendt (2008) predicted the positive influence of employee perceptions of autonomy, pressure, structure, self-expression, and trust aspects of psychological climate on affective commitment and job satisfaction. Adding to this stream of research, Carless (2004) predicted the mediating role of psychological empowerment in the relationship between psychological climate and job satisfaction.

Emphasizing the role of climate strength and climate quality in an organization, Vianen et al., (2011) measured the impact of individual climate perceptions (reward, innovation, and cooperation) on employee commitment. Individual climate perceptions were found to be significantly related to commitment. However, the climate strength moderated the relationship between innovation and cooperation dimensions and commitment, not for reward and commitment. With regard to climate quality, it was further observed that individual climate perceptions were no longer related to commitment in strong climates of high quality. Simply put, climate quality was found to be related to commitment above and beyond individual climate perceptions.

Consistent with this, Amenumey and Lockwood (2008) tested and confirmed the relationship between psychological climate (managerial Support, customer orientation, internal service, and information/communication) and psychological empowerment and it was apparently

suggested that these psychological climate dimensions are significant to creating an environment in which employees feel that they are psychologically empowered.

In an effort to explain the influence of psychological climate on employees' workplace behaviors, Langkamer and Ervin (2008) investigated the impact of work experiences on employees' intentions to leave the organization through mediating influence of affective commitment and morale in this relationship. Results demonstrated the relationship between psychological climate and intent to leave the organization by influencing employees' affective commitment and morale.

Recently, Clarke (2010) conducted one meta-analytic study where psychological climate (employees' perceptions of job, role, leader, group, and organization) have been observed as positively related with employees' safety behaviours through its impact on employees' perceptions of the safety climate where employee work related attitudes and well-being partially mediated the relationship between safety climate and safety behaviours and occupational accidents.

Dierdorff, Rubin, and Bachrach (2011) evaluated the effects of two facets of work context namely social and task context on the relationship between employees' role expectations and supervisor ratings of their citizenship. While supporting the role theory framework, it was found that both the social and task context moderated the relationship between employees' role expectations for prosocial role requirements and citizenship.

In a similar vein, more recently, Clark, Zickar, and Jex (2013) investigated the moderating influence of role definitions on the association between psychological safety climate and nurses' organizational citizenship behavior (OCB) and found that nurses' perceptions of job requirements regarding OCB (i.e., OCB-specific role definitions) moderated the relationship between psychological safety climate and peer-rated OCB. Conforming to this, Lee, Wu, and Hong (2007) also demonstrated the influence of safety climate on OCBs while observing the mediating psychological effects of employees' work attitudes (job satisfaction and organizational commitment) in this relationship.

In a more recent study, Garner and Hunter (2013) found psychological climate (supervisor support, coworker support, role over-load, role-clarity, and job challenge and autonomy) as a predictor of employee work attitude (job satisfaction, pay satisfaction, job involvement, and

turnover intentions) and actual turnover. Also, work attitude mediated the relationship between psychological climate and turnover of employees.

Putting further an emphasis on the role of employee behaviours in the relationship between psychological climate and performance outcomes, D'Amato and Zijlstra (2008) studied the relative impact of psychological climate and one personal resource i.e. self-efficacy on quality of performance and burnout as mediated by employees' citizenship behaviours. Interestingly, psychological climate perceptions were found to have stronger positive relationship with OCBs than self-efficacy and had stronger effects on outcomes of behaviour.

Shuck, Reio, and Rocco (2011) found in their study that employees who reported experiencing a positive psychological climate were more likely to report higher levels of discretionary efforts. Another important finding from the contemporary psychological climate researches states that employee perceptions of their workplace attributes may lead to better employee decision-making performance (Barkhi & Kao, 2011), and sales performance (Martin & Bush, 2006).

Interestingly, the extant literature also suggests that climate operates as an interface between psychologically significant organizational attributes (HR system, practices, policies, procedures, and processes) and work-related outcomes (such as job attitudes, satisfaction, empowerment, employee behaviors, task performance, safety, and ethics, which in turn affect the broader organizational outcomes (Rogg et al., 2001; Bowen & Ostroff, 2004; Mossholder, Richardson, & Settoon, 2011). For instance, Evans et al., (2007) observed psychological climate as an explanatory mechanism between organizational subsystem and employee outcomes while examining sales-related psychological climate perceptions of employees (the organization's customer orientation, sales innovativeness, and sales supportiveness) as a mediator between sales control system (output control, process control, and capability control) and salesperson job satisfaction and performance.

Similarly, Kaya, Koc and Topcu (2010) found that organizational climate (support for innovation, managerial competence and consistency, workload pressure, organizational boundaries, cohesion, organizational ethics) in Turkish banks improved as a result of HRM practices (behavior and attitudes, team working, extensive training, written policy, training in

multiple functions, incentives, performance appraisal, feedback on performance) and this resulted into increased job satisfaction of employees.

The discussion above concludes that of theoretical and practical interest from a psychological climate perspective are the causal factors and outcomes of employees' personal judgment of their work settings. Table 2.2 represents the summary of previous psychological climate studies with a specific focus on its employee level outcomes.

Table 2.2 Summary of Previous Studies on Psychological Climate

Source/Study	Sample, setting and study type	Antecedents	Concept attributes	Consequences (C)	Moderators/Mediators	Climate domain	Key climate results
Martin and Bush, (2006)	106 sales manager and 313 sales representatives	Transformational leadership	Experiential-based, multi-dimensional, and enduring perceptual phenomenon. It shapes individual behaviour.	Empowerment Sales performance Customer-oriented selling	Relationship between sales manager PC, psychological empowerment, and transformational leadership (TL); sales manager TL, sales representative PC, empowerment, customer-oriented selling, and sales performance.	Support Recognition Fairness Innovation Autonomy Trust Cohesiveness, and Pressure	Sales manager-Positive climate perceptions lead to greater empowerment and transformational leadership. Sales representative- sales person's empowerment perceptions, a sales manager's use of transformational leadership, and the sales person's psychological climate perceptions predicted customer-oriented selling.
Schulte, Ostroff, and Kinicki, (2006)	1076 employees from 120 branches of a US-based bank Hierarchical Linear modeling		A property of the individual Individuals' own impression of the interrelatedness among various climate dimensions	Job satisfaction	The relative impact of psychological climate dimensions, climate systems and unit-level climate on job satisfaction	Managerial support Company vision Open and clear communication Training focus Team focus Clarity Personnel support for service Rewards for service	Individuals' idiosyncratic perceptions of the climate affected job satisfaction; unit-level climate systems also had some influence on individual satisfaction above and beyond individual perceptions.
Amenumey and Lockwood, (2008)	143 hotel employees		psychologically meaningful description of situational referents	Psychological empowerment	The relationship between different aspects of employees' work environments and their feelings of empowerment (meaning, influence, and competence)	Work facilitation Managerial support Customer orientation Feedback Role ambiguity Internal service Information/communication	Psychological climate had a significant relationship with psychological empowerment

Biswas, (2008)	357 participants (180 from manufacturing concerns) and (177 from service organizations).		A primary antecedent to a number of individual level outcomes Individuals' perceptions of their immediate workplace atmosphere based on their daily experiences	Affective commitment Job involvement OCBs	The relationship between psychological climate and job involvement and OCBs; affective commitment as a mediator of the relationship between psychological climate, job involvement and OCBs.	Supportive management Role clarity Contribution Recognition Self-expression Challenge	Psychological climate positively influenced job involvement and OCBs, and affective commitment mediated this relationship.
D'Amato and Zijlstra, (2008)	406 hospital employees		Notion of cognitive regulation within situations A molar construct	OCB Performance Less burnout	The relationship between individual factors (psychological climate and self-efficacy) and work outcomes (quality of performance and emotional exhaustion); OCB as a mediator of this relationship	Organizational policies Job procedures Managerial practices	Climate and individual difference variable had significantly predicted OCB and performance outcomes. OCB mediated the relationship between psychological climate and self-efficacy and burnout and performance.
Langkamer, Ervin, (2008)	649 army captains Regression analysis		A multidimensional, higher order construct Individual's cognitive appraisal and interpretations of organizational events and processes A mediator between actual situational referents and employee outcomes.	Employee morale Affective commitment Intention to leave the organization	The relationship between employees' work experiences and intentions to leave; affective commitment and morale as a mediator of the relationship between psychological climate perceptions and intentions to leave; continuance commitment as a moderator of the relationship between affective commitment and intention to leave	Perceptions of leader Work group Organization Equal opportunity Antagonistic behaviour	Psychological climate had significant influence on subjects' intentions to leave by affecting their affective commitment and morale.

Larsson, Pousette, and Törner, (2008)	189 blue-collar construction workers		An important condition for everyday work that allows the individual to have influence over his or her job.	Safety performance Safety motivation Safety knowledge	The relationship between psychological climate and work outcomes (safety behaviour); job satisfaction, workplace commitment, safety motivation, and safety knowledge as mediators in the relationship between psychological climate and safety behaviour (structural, interactive, and personal safety behaviour)	Job characteristics Role characteristics Leadership characteristics Workgroup characteristics	Psychological climate had a significant influence on safety behaviour (both directly and indirectly), and safety motivation and safety knowledge mediated the relationship between psychological climate and safety behaviours.
Clarke, (2010)	Meta-analysis		Individual's perceptions of various aspects of the broader organizational context	Shape safety climate	Relationship between PC and safety climate; safety climate as a mediator between PC and safety outcomes; general health as a mediator between safety climate and occupational accident; work attitudes (organizational climate and job satisfaction) as mediators between perceived safety climate and safety behaviour.	Broader organizational context Organizational structure and processes Situational referents related to job, group, leader, and organization and subsystem	PC had a significant effect on safety climate. Work-related attitudes partially mediated the relationship between safety climate and occupational accidents. Safety behaviour and general health partially mediated the relationship between safety climate and occupational accidents. Safety climate partially mediated the relationship between PC and safety behaviour.
Hassan and Rohrbaugh, (2011)	267 employees (in three occupational groups: clerical, professional, and managerial/executives) in 11 New York State agencies		Individual perceptions about the significance of work environment Employees' valuations of the attributes of work environment Emotionally relevant cognitions of relatively proximal situational conditions	Affective organizational commitment	The relationship between perceptions of psychological climate and affective commitment	Role stress and lack of harmony Leadership facilitation and support Challenge and autonomy Social environment characteristics	Various aspects of psychological climate had significant influence on affective organizational commitment. Social environment characteristics and leadership facilitation and support were found to be particularly important in predicting affective commitment.

<p>King, Hebl, George, and Matusik, (2010)</p>	<p>Survey 1- 155 women across industries and occupations Survey 2- 196 female managers Survey 3- 312 women in the construction industry</p>	<p>psychologically meaningful characteristics of organizations Token status</p>	<p>represents the meaning and significance of work contexts for individual employees a descriptive, multidimensional construct that involves an individual's perception of the work situation he or she encounters</p>	<p>Job satisfaction Affective commitment Job stress Turnover intentions Helping behaviours</p>	<p>The relationship between token women psychological climate of gender inequity and job attitudes and behaviours.</p>	<p>Psychological climate of gender inequity (the policies, procedures, and events in the organizations unfairly favour men) climate of diversity</p>	<p>Token women perceived their climates inequitable for women and climate of gender equity had significant relationship with job attitudes and behaviours.</p>
<p>Wei, Han, and Hsu, (2010)</p>	<p>single-industry approach 11 Taiwanese electronic appliances manufacturing plants Multiple sources of data collection-HR managers from each plant for their perceptions of HRM practices. And, For PC, JS, and OCB-576 employees</p>	<p>High – performance Practices</p>	<p>Employee perceptions of policies, procedures, and structure of the organization.</p>	<p>Job satisfaction OCBs</p>	<p>High-performance HR practices have impact on psychological climate, job satisfaction, and OCBs. Job satisfaction mediates the influence of psychological climate and OCB.</p>	<p>Perceptions of organizational support Recognition Innovation</p>	<p>Psychological climate perceptions are positively and significantly associated with job satisfaction and OCB. High performance HR practices are positively related with job satisfaction.</p>
<p>Barkhi and Kao, (2011)</p>	<p>135 group members Regression analysis</p>		<p>Individual's experiential and perceptual attribute that describe cognitive appraisal of the work context</p>	<p>Better decision-making performance</p>	<p>Relationship between PC and decision-making performance of group members using group decision support systems; Goal-clarity as a moderator of the relationship between PC and decision-making performance.</p>	<p>Psychological safety Psychological meaningfulness</p>	<p>Positively associated with decision-making performance. A clear understanding of the decision-goal moderated the relationship between psychological climate and decision-making performance.</p>

Sahin, (2011)	238 employees from private security services organizations Hierarchical Regression		A multidimensional construct that captures employees' perceptions of the overall work environment	Affective commitment Lower turnover intentions	Relationship between psychological climate and turnover intentions; affective commitment as a mediator of the relationship between psychological climate and turnover intentions	Psychological safety Psychological meaningfulness	Psychological climate perceptions were significantly associated with turnover intentions and affective commitment only partially mediated this relationship
Dierdroff, Rubin, and Bachrach, (2012)	198 full-time employees	Role expectations	Various aspects of work environment	Citizenship performance	The moderating effects of work context in the relationship between role expectations and citizenship performance	Work context -task context (autonomy and ambiguity) -social context (interdependence and social support)	Role expectations were predictive of citizenship performance, and socially supportive, autonomous, and less ambiguity elements of work contexts moderated the relationship between role expectations and citizenship performance.
Garner and Hunter, (2013)	95 SUD treatment staff clustered within 29 treatment organizations multilevel discrete-time survival analyses		Employees' perceptions of their work environment	Work attitude Lower turnover intentions	The relationship between psychological climate and staff turnover' work attitude (job satisfaction, pay satisfaction, benefits satisfaction, intentions to quit, and job involvement) as mediator between psychological climate and turnover intentions.	Supervisor support Co-worker support Role overload Role clarity Job challenge and autonomy	Psychological climate had a significant association with staff turnover. Work attitude had full mediation effects in the relationship between psychological climate and subsequent staff turnover.

2.3.1 High-Performance HR Practices and OCB- Role of Psychological Climate

Though high-performance HR practices influence on employees' workplace behaviors, this does not necessarily imply that employees experiencing high-performance HR practices will uniformly behave in ways to benefit the organization at large. Instead, high-performance HR practices create the conditions for employees to perform OCB (Wei et al., 2010). However, strong focus on attitudinal variables as intermediating factors has left the field with a limited understanding of the indirect effects of high-performance HR practices on OCBs.

Furthermore, in spite of growing interest towards evaluating the impact of HRM practices on individual level outcomes in an effort to probe the black-box of HRM–organizational effectiveness relationship, a very little research attention has been aimed at the understanding of the boundary conditions or mechanisms through which HR practices affect citizenship behaviors (Tang & Tang, 2012; Wu & Chaturvedi, 2009; Wei et al., 2010), which can act as key differentiators in the organizational success. As a matter of fact, when deciding to be good organizational citizens or not, employees engross in more complex sense making processes, where high-performance HR practices might be only one of the factors to be considered, the psychological processes at the individual level are likely to function and influence the extent to which employees choose to showcase OCBs.

In understanding the impact of high-performance HR practices on individual outcomes, psychological climate is regarded as a key explanatory variable. Organizations those focus on satisfying employees' psychological needs (meaningfulness, recognition, safety, growth, and development) at work through the effective implementation of HR practices, foster the employee perceptions of a congenial work context that in turn, shape their workplace behavior. Because when employees feel that they are treated well by the organization and that the organization values their thoughts and cares about their well-being, they are more likely to identify their personal goals with those of the organization and invest greater efforts in pursuing them (Brown & Leigh, 1996).

In other words, they are more likely to be involved in behaviors beneficial for the organization. Hence, high-performance HR practices may influence OCBs through employees' positive interpretations of their immediate work environment. However, the psychological climate variable has been less focused in extant literature to demonstrate the role of psychological process of employee involvement in OCBs (Wei et al., 2010). The goal of this study is to begin addressing

this gap in our understanding. It situates employees' climate perceptions as a key psychological mechanism through which high-performance HR practices may have positive influence on OCBs.

2.3.1.1 High-performance HR practices and psychological climate

Decisions by employees to act in ways that enhance the organizational vitality are based on how they make sense of their organizational environments. Ostroff and Bowen (2000) proposed that psychological climate may serve as a mediating mechanism between the HRM system and organizational performance. Gelade and Ivery (2003) found that the effects of progressive HR practices on business performance were partially mediated by employee perceptions of favorable psychological environments. Foley et al., (2012) also found that collective climate perceptions partially mediated the influence of high-performance work systems on firm performance.

HR systems influence various aspects of employees' immediate working environment that may exert psychological influence on them. For instance, if employees are adequately provided with psychological safety and recognized for supererogatory efforts and meaningful contributions at work, then there will be benefits for both the organization and the individual. On the other hand, if employees are not provided with managerial support, clear and consistent job descriptions, and workplace motivation to co-create a vision for the organization, then it is unlikely that employees would be able to give their maximum and exhibit concerted efforts.

Strategic implementation of the HR policies and practices in the organization keeping in mind employees' psychological needs at workplace such as meaningful work activities, supervisory support, clear role responsibilities, recognition, and contribution etc. lead to significant behavioral responses for organizational sustenance. As a matter of fact, HR practices affect the situations that employees experience in the workplace and the social context of the organization (Pereira & Gomes, 2012) by symbolically framing (Rousseau, 1995) and directly communicating (Bowen & Ostroff, 2004) key organizational values and behaviors (Mossholder, Richardson, & Settoon 2011). Significant to this study is the observation that HR practices in India are also increasingly geared towards improving the way individual employees perceive their everyday environment or the way they perceive the psychological climate in the workplace (Biswas & Verma, 2007). With this in mind, High-performance HR practices are expected to influence the employees' perceptions of psychological climate.

2.3.1.2 Psychological climate and OCB

Prior body of research supports the conviction that providing a supportive work environment is directly related to employees' motivation and performance. In fact, work climates shape the context in which employees tend to feel positive, motivated, and excited about what they are doing. For example, managerial support in terms of showing a genuine concern for employees' requirements and opinions and constructive feedback, encouragement to their sense of freedom at work help them develop and cultivate new skills to help resolve work related problems while experiencing an conducive work environment (May et. al., 2004). Such working climates tend to infuse feelings of psychological safety at workplace, as a result of which employees feel more inclined to bring their preferred self at work without fearing 'negative consequences to self-image, status, or career (Kahn 1990, p. 705).

Consistent with this, Brown and Leigh (1996) enumerated some important facets of work context (such as supportive management, role clarity, self-expression, recognition, contribution, and job-challenge) which may have psychological implications for employees concerning safety and meaningfulness at work and found that their perceptions of such work contexts (i.e. positive psychological climate) generated a sense of self-worth, value, and responsibility and even contributed to organizational success through greater employee involvement, effort, and performance. This is also important when considering employees' workplace behaviours that are relevant for organizational goals such as OCBs.

Work climate operates in such a way so as to regulate and shape most employee work related decisions such as performing, participating and renouncing and hence, functions as an important determinant of employees' citizenship behaviours. Given the conditions of psychological meaningfulness at work, employees tend to identify themselves with their work roles and feel that their work is worthwhile. This will concurrently motivate employees to direct their higher levels of energies and enthusiasm towards achieving organizational goals. In this process, it is more likely that employees will be encouraged to exert extra efforts to recognize themselves as worthy members of the organization and will behave in citizenship ways.

Following this, it is realistic to assume that an encouraging and productive work environment can play a dominating role in encouraging employees' positive workplace behaviours. It is argued that OCBs may be regarded as a direct expression of employees' appraisal of the

contextual aspects of their working life in organizations. Because climate perceptions tend to influence employee motivation at the workplace in that these perceptions can work to facilitate or confine the display of OCBs. For instance, OCBs are predominantly conceived as goal-directed behaviour that is initiated by internal goals set by an individual. These goals may be the result of employees' interpretations and personal redefinitions of the characteristics of their task environments (D'Amato & Zijlstra, 2008).

2.4 WORK ENGAGEMENT

The notion of work engagement has led to the genesis of a whole new world of research, discussions, and logics that not only enhance the well-being of employees at workplace, and but also tout a great practical utility since its inception in organizational sciences. Engaged employees put their heart and mind to work, and have consistently been shown to be more productive, profitable, safer, healthier, and less likely to turnover (Fleming & Asplund, 2007; Wagner & Harter, 2006; Wollard, 2011).

Given this, work engagement is emerging as an area of increasing interest while a tremendous amount of research is exploring facilitators and outcomes of this critical psychological state of employees. Consistent with this, Babcock-Roberson and Strickland (2010) tested the relationships between charismatic leadership and OCB, via work engagement. Employees' engagement at work was found to be influenced by their perceptions of leader charisma which further lead to the involvement in OCBs.

Salanova et al., (2011) reported the direct impact of transformational leadership on work engagement, and observed that work engagement mediates the influence of transformational leadership and self-efficacy on extra-role performance of nurses.

Song et al., (2012) assessed the mediating effects of work engagement to explain the relationship between transformational leadership and organizational knowledge creation practices. The significant influence of transformational leadership on employees' work engagement was confirmed, and work engagement was found to mediate significantly the relationship between transformational leadership and organizational knowledge creation practices in the Korean business context.

On the other hand, Li, Sanders, and Frankel (2012) examined the influence of LMX on work engagement and job performance, and the moderating role of HRM consistency in the

relationship between LMX and work engagement. It was predicted that LMX had positive influence on work engagement, which was found to have mediating effects in the relationship between LMX and job performance. Also, HRM consistency was found to strengthen the relationship between LMX and work engagement.

Lately, Runhaar et al., (2013) examined the moderating influence of work context, in terms of autonomy and leader membership exchange (LMX), on the relationship between work engagement and organizational citizenship behaviours (OCBs). The results confirmed the pertinent role of work context i.e. in case of high autonomy and LMX, work engagement had no explanatory value in predicting OCBs.

Putting further an emphasis on the situational factors in augmenting engagement, Mone et al., (2011) suggested the role of performance management (setting performance and development goals, providing ongoing feedback and recognition, managing employee development, conducting appraisals, and building a climate of trust and empowerment) in enhancing conditions for employee engagement. On the other side, Pitt-Catsouphes and Matz-Costa (2008) revealed workplace flexibility a powerful positive predictor of employees' engagement at work. Rurkkhum and Bartlett (2012) evaluated the impact of employee engagement on OCB while analyzing the moderating effects of HRD practices in this relationship. A positive relationship was found between employee engagement and OCB but the study failed to find an evidence of moderating effects of HRD practices in this relationship.

In a similar vein, Mohapatra and Sharma (2010) predicted the role of situational factors (organizational climate in terms of benefits, career opportunity, communication, job content, objectivity, participative management, pay, recognition, training and development, work-life balance, and work ethic) which are the product of a variety of HR policies and practices that impinge upon the work experiences of employees and employee engagement among managers of a public sector undertaking in India. Out of all the situational factors examined, job content was found to be one of the significant predictors of engagement along with pay and objectivity. The study concluded on the fact that employee engagement is most certainly influenced by how the management of an organization manages its human resources.

Similarly, Shuck, Reio, and Rocco (2011) examined the causes and consequences of work engagement and that job fit, affective commitment, and psychological climate were found to be

significantly related to engagement, while engagement was observed as significantly related to discretionary effort and turnover intentions. Also, employee engagement was predictive of lower turnover intentions. However, the study failed to find support for the predictive value of engagement for discretionary efforts.

Further, to explore the impact of meaningful work on multiple employee outcomes including job satisfaction, organizational commitment, and employee engagement, Fairlie (2011) argued that employees should be more engaged in work that they view as personally meaningful. The results demonstrated meaningful work characteristics as having the strongest relationships with engagement.

While exploring several key antecedents and consequences of work engagement, Christian et al., (2011) used meta-analytic path modeling to explore the relation between individual and organizational factors (job characteristics, leadership, and dispositional characteristics) and job performance (task performance and contextual performance), and the mediating effects of engagement in this relationship. Additionally, work engagement was found to exhibit discriminant validity over job attitudes (job satisfaction, organizational commitment, and job involvement).

Gupta and Kumar (2013) explore the relationship between perceptions of performance appraisal justice and engagement in the Indian business context. Distributive justice and informational justice dimensions were found to have a strong impact on engagement.

Adding further to the field of human resource management, Karatepe (2013) tested the effects of high-performance work practices (HPWPs) on work engagement and work engagement was put as a mediating variable in the relationship between HPWPs and job performance and extra role customer service. HPWPs in terms of employees' appraisal of training, empowerment, and rewards were found to enhance work engagement of employees which furthers the tendency of job performance and extra role customer service.

Similar to this direction, Juhdi, Pa'wan and Hansaram (2013) examined the role of HR practices (career management, person-job fit, pay satisfaction, performance appraisal, job control) on employees' sense of engagement and turnover intentions. Out of these HR practices, career management was found to be the strongest predictor of engagement. Further, the study suggested the pivotal role of effective HR system on engagement which in turn, was found to be predictive of employees' organizationally benefit behaviour in terms of lower turnover intentions.

Shantz, Alfes, Truss, & Soane (2013) tested the role of engagement in the relationship between job design and task performance, citizenship and deviant behaviours. Employees, who perceive job attributes in terms of high levels of autonomy, task variety, task significance and feedback were observed as highly engaged, exhibited more citizenship performance and fewer deviant behaviors in organizations.

Emphasizing the role of individual characteristics in determining the extent to which employees may feel engaged in their work, Bakker, Tims, and Derks (2012) examined the role of proactive personality and job crafting ability on work engagement and in-role job performance and suggested that employees who possess a proactive personality were more likely to craft their jobs which in turn predicted work engagement and in-role performance.

In another study Bakker, Demerouti, and Brummelhuis (2012) examining the relationships between work engagement and performance, Work engagement was found to be positively related to task performance, contextual performance, and active learning, particularly for employees high in conscientiousness.

Liao et al., (2013) examined the joint effects of employee personality (i.e., extraversion, neuroticism, and conscientiousness) and social exchange relationships with peers (i.e., team-member exchange; TMX) in predicting work engagement. These three focal personality traits were found to have moderating effects on the relationship between TMX and work engagement.

Wefald et al., (2011) examined the effects of personality characteristics (specifically extraversion, conscientiousness, and positive affect), transformational leadership, and perceived organizational support on work engagement. Also, the role of work engagement in influencing important work outcomes in terms of affective commitment and job satisfaction and intentions to leave the organization was examined. The study reported strong relationship between personality and work engagement and weaker relationships between engagement and leadership. Also, work engagement was observed as having significant relationships with and that engagement mediates the relationship between personality and organizational outcomes.

Based on the JD-R model, Sulea et al., (2012) posited work engagement as mediator between job and personal characteristics and positive and negative extra-role behaviors and found that work engagement explains, in part the influence of job and personal characteristics i.e.

perceived organizational support and conscientiousness on OCB and the influence of job demands (interpersonal conflicts at work) on CWB.

Contributing further, Bakker and Xanthopoulou (2013) explored the role of job and personal resources on work engagement to know its impact on creative task performance and charismatic leadership behaviour. Work engagement was to have full mediating influence of job and personal resources on creativity and charismatic leadership.

The influence of employees' perceptions of justice in organizations, psychological contract fulfillment, and organizational support on work outcomes has been well-documented in prior literature. In the view of this fact, putting an emphasis on the social exchange mechanism of perceived organizational support (POS) and psychological contract, Biswas, Varma, and Ramaswami (2012) linked procedural and distributive justice to employee engagement. Findings established the direct influence of POS and psychological contract on work engagement and distributive justice was found to have indirect effects on work engagement through POS and procedural justice was found to have indirect on work engagement effects through POS and psychological contract.

Karatepe (2011b) investigated and confirmed work engagement as a full mediator of the effects of procedural justice on affective organizational commitment, job performance, and extra-role customer service of hotel employees.

Chughtai and Buckley (2011) explored the effects of trust in supervisor and trust propensity on employees' work engagement and investigated the mediating influence of learning goal orientation in the relationship between work engagement and in-role job performance and innovative work behaviour. It was suggested that both trust in supervisor and trust propensity had a positive influence on work engagement. Additionally, work engagement was found to have direct and indirect effects on in-role job performance and innovative work behaviour through learning goal orientation.

Bal, Cooman, and Mol (2013) explored the dynamics of psychological contracts with work engagement and turnover intention, and the influence of organizational tenure in these relationships. The relationships between psychological contract fulfilment and work engagement and turnover intention were only present among employees with low tenure, and were non-significant for highly tenured employees.

Bhatnagar (2012) evaluated the mediating effects of work engagement in the relationship between psychological empowerment and innovation and turnover intentions. Psychological empowerment was found to be a strong predictor of work engagement. The study also confirms the mediating mechanism of work engagement through which psychological empowerment affects innovation and results in employees' lower turnover intentions.

Yalabik, Popaitoon, Chowne, and Rayton (2013) assessed the role of work engagement in the relationships between employee attitudes (affective commitment, job satisfaction) and outcomes (job performance and intention to quit). Work engagement was to play full mediation role in the relationship between employee attitudes and job performance, and accounted for the influence of employee attitudes on intentions to quit in part.

To conclude upon the above literature review, it can be seen that contemporary researchers from every part of the world are increasingly recognizing work engagement as a vital phenomenon that may affect organizational effectiveness, innovation, and competitiveness (Welch, 2011) and that is influenced by so many factors at work place including HR orientation, work climate, LMX, job characteristics, organizational justice, psychological contract, trust, empowerment, and dispositional attributes of an individual. Table 2.3 represents a more organized view of previous research studies with a specific focus on employees' behavioral outcomes of work engagement keeping in mind objectives of the present study.

2.4.1 High-Performance HR Practices, Psychological Climate, and OCB - Role of Work Engagement

2.4.1.1 High-performance HR practices and work engagement

Previous researches indicated that high-performance HR practices play a critical role in advancing employees' competencies and can also facilitate the employee development of work engagement (Karatepe, 2013; Alfes et al., 2012). For instance, allocation of job resources to individual employees that comes under the scope of human resource management policy and practices in the organization has been advocated as an important determinant of employees' work engagement (Shantz et al., 2013). Additionally, HR practices empower employees in their daily work, which would best be displayed by their higher levels of personal energies in work.

Table 2.3 Summary of Previous Studies on Work Engagement and Employees' Behavioral Outcomes

Source/Study	Sample, setting and study type	Objective	Antecedents	Concept attributes	Consequences (C)	Key findings
Salanova and Schaufeli (2008)	Multi sample study -386 technology employees from Spain -338 telecom managers from Netherlands	To investigate the mediating role of work engagement in the relationship between job resources and proactive behaviour at work.	Job resources (control, feedback, and variety)	an indicator of intrinsic motivation at work ‘Positive, fulfilling, work-related state of mind that is characterised by vigor, dedication, and absorption. a more persistent affective-motivational state that is not focused on any particular object, event or behaviour.	Proactive behaviour	Work engagement fully mediated the impact of job resources and proactive behaviour in both samples.
Dijkers, Jansen, de Lange, Vinkenburg, and Kooij (2009)	794 Dutch government employees	To examine the moderating role of proactive personality in relation to job demands, job resources and engagement.	Job demands (quantitative demands) Job resources (influence at work, social support) Proactive personality	a positive work-related state of mind that is characterized by vigor, dedication, and absorption		Proactive personality was associated with an increase in engagement 18 months later. Moreover, proactive employees perceiving high social support reported the highest levels of engagement over time.
Babcock-Roberson and Strickland (2010)	102 undergraduate students at a large western university	To explore the mediating influence of work engagement on the role of leader charisma to enhance OCB.	Charismatic leadership	the amount of energy and dedication with which employees contribute to their job.	Organizational citizenship behaviours	Results indicated the full mediating effects of work engagement in the relationship between leader charisma and OCB.

<p>Christian, Garza, and Slaughter (2011)</p>	<p>Meta-analysis</p>	<p>To investigate the distinctiveness of work engagement and examining the mediating effects of work engagement in the relation between distal antecedents and job performance.</p>	<p>Job characteristics (autonomy, task variety, task significance, problem solving, job complexity, feedback, social support, physical demands, work conditions)</p> <p>Leadership (Transformational, LMX)</p> <p>Dispositional Characteristics (Conscientiousness, Positive affect, Proactive personality)</p>	<p>Investment of personal resources A motivational variable</p> <p>Self-investment of personal resources in work</p> <p>A higher order construct</p> <p>A relatively enduring state of mind</p>	<p>Job performance</p> <p>Task performance</p> <p>Contextual performance</p>	<p>Work engagement was related to job performance; and mediated the relationship between job characteristics, leadership, and dispositional characteristics and job performance. Also, work engagement was identifying as a unique construct.</p>
<p>Chughtai and Buckley (2011)</p>	<p>168 research scientists drawn from 6 Irish science research centres</p>	<p>Examining the relationship between trust and engagement.</p> <p>To examining learning goal orientation as a mediator of the influence of work engagement on two forms of performance (in-role job performance and innovative work behaviour).</p>	<p>Trust in supervisor</p> <p>Trust propensity</p>	<p>Characterized by energy, self-confidence, genuine enthusiasm, and passion for work.</p> <p>positive, fulfilling work related state of mind that is characterised by vigour, dedication and absorption.</p>	<p>In-role job performance</p> <p>Innovative work behaviour</p>	<p>A positive and significant relationship was observed between trust in supervisor and trust propensity and work engagement. Learning goal orientation was partially accounted for the relationship between work engagement and in-role job performance and innovative work behaviour.</p>
<p>Salanova, Lorente, Chambel, and Martinez (2011)</p>	<p>280 dyads from a large Portuguese hospital</p>	<p>To examine the role of self-efficacy and work engagement in the association between transformational leadership and extra-role performance.</p>	<p>Transformational leadership</p> <p>Self-efficacy</p>	<p>A motivational and positive state of mind which is characterized by vigor, dedication, absorption. intrinsic motivational process</p>	<p>Extra-role performance</p>	<p>Transformational leadership had a significant impact on extra-role performance via self-efficacy and work engagement.</p>

Shuck, Reio Jr, Rocco (2011)	283 workers from different organizations	To the links between job fit, affective commitment, psychological climate and employee engagement, and discretionary effort, and intention to turnover.	Job fit Affective commitment Psychological climate	An individual employee's cognitive, emotional, and behavioural state directed toward desired organizational outcomes. A state of long-term emotional involvement	Discretionary effort Lower intention to turnover	A significant relationship employee engagement was reported with job fit, affective commitment, and psychological climate, discretionary effort, and intention to turnover.
Bakker, Demerouti, and Brummelhuis (2012)	144 employees from several occupations	To investigate the interaction between work engagement and personality trait (conscientiousness) when predicting other ratings of task performance, contextual performance, and active learning.		An active, positive work related state of mind Beneficial for both the individual and the organization	Task and contextual performance	Conscientiousness moderates the relationship between engagement and three types performance. Employees were most positively evaluated when they highly engaged in their work.
Bhatnagar (2012)	291 managers from Indian industrial sectors	To examine the relationship between psychological empowerment, work engagement, innovation, and turnover intention; the mediating mechanism of work engagement in the relationship between psychological empowerment and innovation and turnover intention.	Psychological empowerment	A positive experience High energy, resilience, a willingness to invest effort on the job and persistence in the face of difficulties	Innovation Low turnover intentions	There was a strong empirical relationship between psychological empowerment, work engagement, innovation, and turnover intention. Work engagement was a strong mediator between psychological empowerment and innovation.
Biswas, Verma, and Ramaswami (2012)	238 managers and executives from 12 manufacturing and service firms in India	To examine the influence of distributive and procedural justice on employee engagement and the mediating mechanism of POS and psychological contract	Distributive and procedural justice Perceived organizational support and psychological contract	Employees who are psychologically and cognitively occupied with their work		POS mediated the relationship between distributive justice and employee engagement, and both POS and psychological contract mediated the relationship between procedural justice and employee engagement.

Gupta and Kumar (2013)	Multi sample method Study 1- 203 professional working in Indian subsidiaries of MNCs Study 2- 323 professional working in Indian subsidiaries of MNCs	To explore the relationship between perceptions of performance appraisal fairness (HRM practices) and employee engagement in the Indian business context	Influence of performance appraisal justice perceptions on work engagement	An important determinant of employee performance		PA justice (distributive and informational) perceptions lead to higher work engagement and well-being.
Karatepe (2013)	Full time front-line hotel employees and their managers	To examine whether work engagement functions as a mediator of the effects of high-performance work practices on job performance and extra-role customer service.	High-performance work practices	A motivational construct A positive fulfilling work related state of mind Characterized by high levels of energy, dedication, and happiness at work.	Job performance and extra-role customer service	Work engagement acts as a full mediator of the effects of high-performance work practices on job performance and extra-role customer service.
Li, Sanders, and Frenkel (2012)	298 employees and 54 supervisors from a large luxury hotel in southern China	To examine the relationship between LMX and employee job performance; the mediating role of work engagement in this relationship and the moderation effects of HRM consistency in the relationship between LMX and work engagement.	LMX	Individual perceptions about the significance of work environment Employees' valuations of the attributes of work environment Emotionally relevant cognitions of relatively proximal situational conditions	Job performance	LMX was positively related to employee job performance, work engagement mediated this relationship and HRM consistency strengthened the influence of LMX on work engagement.
Liao, Yang, Wang, Drown, and Shi (2013)	235 Chinese employees	To examine the joint effects of employee personality (extraversion, neuroticism, and conscientiousness) and social-exchange relationships with peers (TMX) in predicting work engagement.	Team-member exchange Personality traits	indicates the extent to which employees' psychological engagement is expressed in performing specific work tasks and roles. a role-based motivational concept		The three focal personality traits moderated the TMX-work engagement relationship simultaneously

<p>Song, Kolb, Lee, and Kim (2012)</p>	<p>432 cases (low-level employees and middle-level managers) from 6 different types of organizations.</p>	<p>To assess the mediations effects of work engagement in the relationship between transformational leadership and organizational knowledge creation practices in the Korean business context</p>	<p>Leadership practices (transformational leadership)</p>	<p>Can make a true difference for employees and may offer organizations a competitive edge. A distinct concept differentiated from related concepts of extra-role behaviour, organizational commitment, job satisfaction, and workaholism.</p>	<p>Knowledge creation</p>	<p>Transformational leadership was found to be a significant predictor of work engagement and organizational knowledge creation; work engagement was found to be a significant mediator in the relationship between transformational leadership and organizational knowledge creation practices.</p>
<p>Sulea, Virga, Maricutoiu, Schaufeli, Dumitru, and Sava (2012)</p>	<p>258 employees from three Romanian organizations</p>	<p>To examine the influence of job resources and personal resources on OCBs via work engagement; and the effect of job demands on CWB via work engagement.</p>	<p>Job resources (perceived organizational support) Job demands (interpersonal conflicts at work) Personal resource (conscientiousness)</p>	<p>Employees' affective-motivational state</p>	<p>Positive extra role behaviors (OCBs) Negative extra-role behaviors (CWBs)</p>	<p>Work engagement explains in part the influence of job and personal characteristics on OCBs. The mediating effect was stronger for OCB than for CWB.</p>
<p>Bakker and Xanthopoulou (2013)</p>	<p>84 female school principals and 190 teachers</p>	<p>To test the Job Demands-Resources model of work engagement; the influence of job resources on creativity and charismatic leadership behaviour through personal resources and work engagement</p>	<p>Job resources (autonomy, social support, performance feedback, professional development) Personal resources (self-efficacy, resiliency)</p>	<p>a positive, fulfilling, work-related experience that includes three complementary dimensions: an energetic (i.e. vigor), an affective (i.e. dedication) and a cognitive dimension (i.e. absorption).</p>	<p>Creative performance and charismatic leadership behaviour</p>	<p>Personal resources partially mediated the relationship between job resources and work engagement. Work engagement fully mediated the relationship between job resources and creativity, but not between job resources and charisma personal resources had an indirect effect on creativity through work engagement. Work engagement fully mediated the relationship between personal resources and charisma</p>

<p>Runhaar, Konermann, and Sanders (2013)</p>	<p>211 teachers from 6 Dutch schools for secondary education</p>	<p>To examine the influence of teachers' work context on the relationship between their work engagement and OCBs; work context in terms of autonomy and LMX moderates the relationship between work engagement and OCBs.</p>		<p>Positive and fulfilling work-related state of mind of the individual employee</p> <p>A motivational construct</p>	<p>OCBs- OCBI and OCBO</p>	<p>Positive relationship found between work engagement and OCB but the study demonstrated the important role of work context in predicting OCBs i.e. the more engaged employees were, the more they exhibited OCBs, but only in conditions of low autonomy and low LMX</p>
<p>Shantz, Alfes, Truss, and Soane (2013)</p>	<p>283 employees from a consultancy and construction firm based in the UK and from supervisors' independent performance evaluations.</p>	<p>To examine the mediating mechanism of employee engagement in the job design-performance relationship</p>	<p>Task variety Autonomy Task significance Task identity Feedback from job</p>	<p>A distinct, unique, and valid construct</p> <p>a multidimensional latent motivational construct with three dimensions, namely vigour, dedication and absorption.</p>	<p>Task performance</p> <p>Organizational citizenship behaviour</p> <p>Deviant behaviours</p>	<p>The results reveal that employees who hold jobs that offer high levels of autonomy, task variety, task significance and feedback are more highly engaged and, in consequence, receive higher performance ratings from their supervisors, enact more organizational citizenship behaviours and engage in fewer deviant behaviours.</p>

Furthermore, HR practices including career management and training and development activities show organizational commitment and consistent efforts towards its human capital in enhancing employees' skills, providing learning opportunities to them, and facilitating their future growth and development in the organization. Employees' positive experiences of HR practices such as career management, rewards, pay satisfaction, empowerment, and performance appraisal have been found to have implications for work engagement (Juhdi et al., 2013; Karatepe, 2013). Given this performance-oriented HR focus of the organization, employees tend to feel satisfied and come to work with an enduring state of mind triggering work engagement in organizations.

Keeping the idea of social exchange theory in mind, it has been argued that when employees find that their organization is concerned for their needs and concerns at workplace and really cares for their development, they tend to pay back to the organization with an activated state of mind at work. Consistent with this, high-performance HR practices are assumed to have synergistic effects on employees' work engagement. Earlier studies have identified the role of individual HR practices on employee attitudes and behaviours (Boselie et al., 2005). For instance, Costan and Salazar (2011) explored the impact of training and development on employee job satisfaction, loyalty, and intent to stay and suggested that when employees perceive the opportunity to develop new skills they tend to feel more satisfied with their jobs, more loyal, and more likely to stay with the organization. However, a combination of performance-oriented HR practices needs to be implemented holistically to avoid conflicting impression on employees' mind and to achieve more common organizational objective.

2.4.1.2 Psychological climate and work engagement

Psychological climate signifies employees' sense making of the work context based on the cognitive inferences of situations and psychological processing of perceptions into more meaningful interpretations of organizational realities. D'Amato and Zijlstra, (2008) state that employees do not respond to the work environment directly, but must first perceive and interpret their environment (p. 36).

Recent work in the area of positive psychology also postulates the idea of developing positive contextual and environmental conditions for human excellence at work that is when an organization is anytime ineffective to accommodate the psychological needs and concerns of its employees or fails to concern about the socio-

psychological context of the workplace, they tend to withdraw their positive energies from work and may feel disengaged at work. This illustrates that the appraisal of psychological climate has a motivational or emotional implication by nurturing employee well-being and that apart from the overt behaviors (e.g. OCBs), there are also some overt aspects of behavior: the cognitive, energetic, and affective processes that accompany and regulate those behaviors (D'amato & Zijlstra, 2008). The constant evolution of 'work engagement' may signify this overt aspect of behavior which signifies a positive and high arousal affective state of employees' mind which is characterized by positive energy and involvement.

Work engagement shares a close connection with climate perceptions in that it can stimulate employees to employ personal resources in their work roles. Carrying forward this idea of positive climate for resonance at work, Shuck et al., (2011) suggest that an employee's perception of well-being and interpretation of what has the potential to bring emotional or psychological harm is directly related to engagement. This is further affirmed as disengagement in work roles is often related to the perception of poor workplace conditions such as less than meaningful work, feelings of non-support from managers, and poor co-workers relations (Fairle, 2011; Shuck et al., 2011; Shuck & Herd, 2012). This implies climate perceptions may serve as a favorable condition to facilitate the development of employees' psychological well-being, which in turn spurs motivational and affective reactions to work (Martin, Jones & Callan, 2005) that in our case is 'work engagement'.

2.4.1.3 Work engagement and OCB

Work engagement is a relatively stable state of mind that is more persistent and not focused on any particular object, event, individual or behavior" (Schaufeli et al., 2002b). Engaged employees put their heart and mind to work, and have consistently been shown to be more productive, profitable, safer, healthier, and less likely to turnover (Fleming & Asplund, 2007; Wagner & Harter, 2006; Wollard, 2011).

In organizational context, the term work engagement has been described as "a desirable condition, has an organizational purpose, and connotes involvement, commitment, passion, enthusiasm, focused effort, and positive energy", (Erickson, 2005; Macey & Schneider, 2008). This posits, engaged employees being enthusiastic, dedicated, and psychologically involved are more able to invest their active physical strength and

emotional energy towards the fulfilment of organizational goals. For instance, engaged employees are observed as optimistic and spontaneous, they also tend to exhibit positive attitudes and proactive behaviors at work place (Bakker, Demerouti, & Verbeke, 2004; Christian et al., 2011; Schaufeli, Taris, & Bakker, 2006; Shimazu & Schaufeli, 2009) to sustain organizational effectiveness (Welch, 2011).

Notable in this direction, work engagement is more than just the investment of a single aspect of the self; it represents the investment of multiple dimensions (physical, emotional, and cognitive energies) so that the experience is holistic and simultaneous (Kahn, 1992; Rich et al., 2010; Christian et al., 2011). Hence, engagement is established as a broader construct in that it involves holistic investment of the entire self (Saks, 2006), which may lead to employees' extraordinary performance at workplace including organizational citizenship behaviours.

Prior literature suggest that engaged employees are likely to carry a broad conception of the work role and tend to exhibit extra-role performances that facilitate the organization at large and the people within (Rich et al., 2010; Christian et al., 2011). Towers Perrin, (2003) have also reported that engaged employees bring discretionary efforts to work, in the form of extra time, brain power and energy. Further, it is argued that engaged employees efficiently accomplish their professional goals or in-role performances in less time than others and feel capable to invest their extra resources while behaving in citizenship ways. That is when they have choices; they will act in citizenship ways. Along these lines, there is a reason to expect work engagement to be related to OCBs.

Engagement is considered as one important aspect of managing discretionary efforts at workplace in which employees act in a way that furthers their organization's interests (Lin, 2010). While the utility of work engagement is widely accepted as a higher-order psychological construct that is manifested by different psychological states of fulfillment, and in recent years, empirical evidences in western economies has supported its positive relationship with organizational resources and impact on organizational citizenship behaviours (e.g. Alfes et al., 2012; Karatepe, 2013; Rurkkhum and Barlett, 2012; Sulea et al., 2012), yet much remains unknown in the eastern economies, particularly in the Indian context (Cem Ersoy et al. 2011).

Moreover, investigating the intermediaries in the relationship between high-performance HR practices and OCBs has been the issue of research since last few years.

The extant literature on the relationship between high-performance HR practices and OCBs that count heavily on employee attitudes, employee sentiments (e.g., organizational commitment, job satisfaction, job involvement, organizational justice, and support) have failed to depict a perspicuous picture (e.g., Allen et al., 2003; Alfes et al., 2012; Kehoe & Wright, 2010; Kuvvas, 2008; Snape & Redman, 2010), there exists no consensus as to the extent of mediation offered by these variables. To add even more, individual attitudes and other temporary generalities of emotional ranges have recently been criticized for not providing an inclusive view of an individual's self which encompasses a simultaneous activation of personal energies at work (Alfes et al., 2012). Whereas, high-performance HR practices are implemented with an objective to enhance employees motivation to perform well, which should really impact their willingness to bring a positively activated state of mind at work, while demonstrating higher levels of work engagement. Surprisingly, few attempts have been made to validate these assertions in previous attempts.

Therefore, for a more encouraging and comprehensive perspective, the present study highlights an 'engagement' oriented view of the relational perspective of high-performance HR practices and psychological climate towards OCBs. Work engagement is considered as "one of the most critical psychological state". The present study instead of focusing on other indicators of well-being focuses solely on work engagement as it is grounded in an employee's unique experiences of work (i.e. positive climate perceptions) and that it represents the behavioral manifestation of a cognitive and emotional interpretation of work related environmental inputs and outcomes (Shuck et al., 2011; Shuck & Herd, 2012).

In this endeavor, the present study attempts to develop a model (**See Figure 3.1**) that illuminates the associations between high-performance HR practices, psychological climate, work engagement, and OCBs, and to empirically examine these associations in the model using structural equation modeling (SEM) analysis. Following the preceding discussion, it is likewise argued when an organization makes substantive investments in strengthening and advancing the human capital (through high-performance HR practices) while intending on providing meaningful and safe working environments (i.e. positive psychological climate) in order to develop a high-quality exchange relationship with its employees, there are higher possibilities that they may choose to reciprocate with an increased level of engagement with their work and may even assume the role of good

organizational agents. Thus, it is expected that high-performance HR practices facilitate the development of positive psychological climate perceptions, and higher work engagement that encourages citizenship behaviors towards the organization. The present research study situates psychological climate and work engagement as core underlying psychological mechanisms in the workplace that explain a holistic view of the relationships between high-performance HR practices and OCBs.

Chapter III

Research Methodology

The previous chapters of this study described the importance of employees' increased contributions at workplace in the multi-faceted business environment and the significance of firms' high-performance HR practices, psychological climate, and work engagement to enhance employee manifestations in citizenship behaviors. In specific, chapter II put forward the need of an integrated model for organizational citizenship behavior. In order to identify the variables to be studied, the systematic literature review has greatly supported the study. This chapter describes the objectives of the study and the method of accomplishing these objectives.

3.1 RESEARCH OBJECTIVES

The study aimed to explore the factors leading to enhanced citizenship performance at workplace. Secondly, it aimed to understand the relationship between employees' perceptions of high-performance HR practices and organizational citizenship behaviors as fully mediated by psychological climate and work engagement. In order to provide a point of initial focus for this research, decision had to be made between two choices: whether to view this problem from an organization's perspective i.e. what an organization is doing to enhance employees' citizenship performance at workplace or to study it from an individual's perspective i.e. what motivates an employee to exhibit sustained efforts at workplace. This research chose the latter, as in order to promote social organization at the workplace, it is important first to understand the experiences and perceptions of targeted employees and then build the strategy accordingly, which suggests developing the employee value proposition.

In particular following are the objectives of the study:

1. To study the function of high-performance HR practices on employees' citizenship behaviours.
2. To explore the function of employees' perceptions of the psychological climate on OCBs.
3. To understand the function of work engagement on OCBs.

4. To examine the relationship among high-performance HR practices, psychological climate and work engagement for facilitating OCBs at the workplace.
- 4.1 To examine the relationship between high-performance HR practices and psychological climate.
- 4.2 To assess the relationship between high-performance HR practices and work engagement.
- 4.3 To assess the relationship between psychological climate and work engagement.
- 4.4 To examine psychological climate as mediating variable in the relationship between high-performance HR practices and work engagement.
- 4.5 To examine work engagement as mediating variable in the relationship between high-performance HR practices, psychological climate, and OCBs.

3.2 RESEARCH HYPOTHESES

The research hypotheses proposed for this study are enumerated as follows:

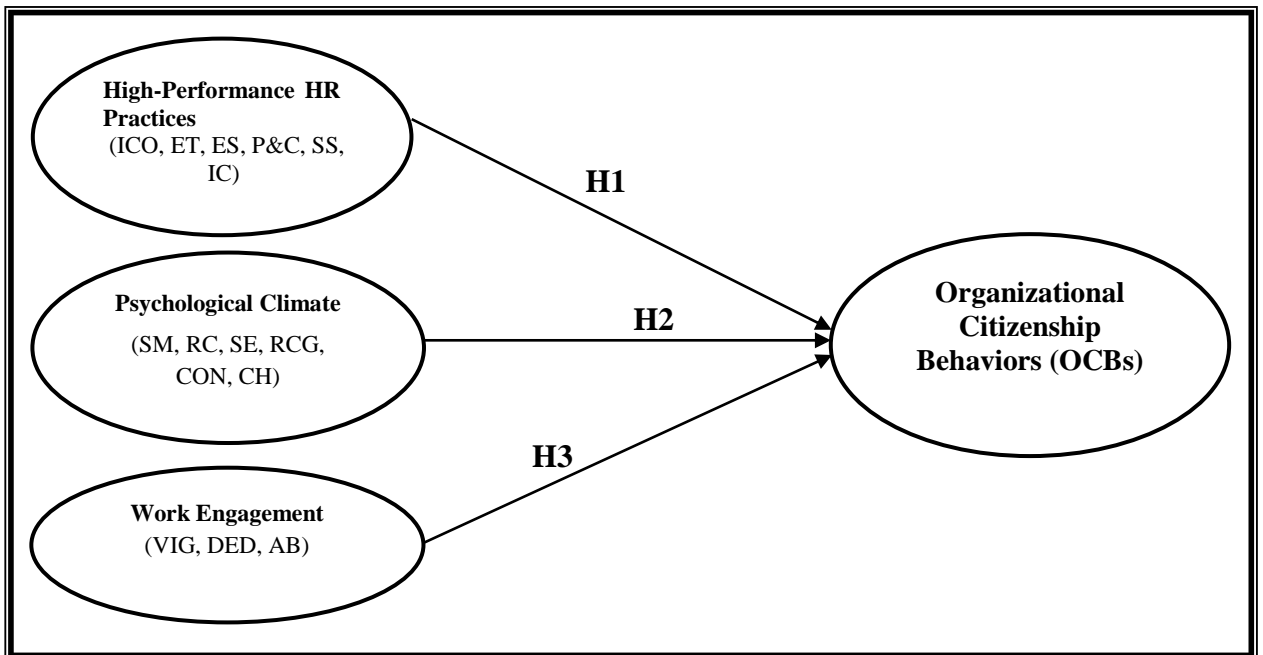
- H1.** High-performance HR practices (internal career opportunities, extensive training, employment security, participation and communication, sensitive selection, incentive compensation) of an organization will significantly predict citizenship behaviors of employees.
- H2.** Employees' perceptions of the psychological climate (supportive management, role-clarity, self-expression, recognition, contribution, and challenge) will significantly predict citizenship behaviors of employees.
- H3.** Employees' work engagement in terms of vigor, dedication, and absorption will significantly predict citizenship behaviors of employees.
- H4.** There is a significant relationship between high-performance HR practices, psychological climate and work engagement for facilitating OCBs at the workplace.
 - H4.1** High-performance HR practices of an organization will be significantly related with employees' perceptions of the psychological climate.
 - H4.2.** Employees' perceptions of the psychological climate will be significantly related with work engagement.

H4.3. High-performance HR practices of an organization will be significantly related with work engagement.

H4.4. Employees' perceptions of the psychological climate will significantly mediate the relationship between high-performance HR practices and work engagement.

H4.5. Work engagement will significantly mediate the influence of high-performance HR practices and psychological climate on OCBs.

Figure 3.1 Predictor Variables of Organizational Citizenship Behaviors (OCBs)

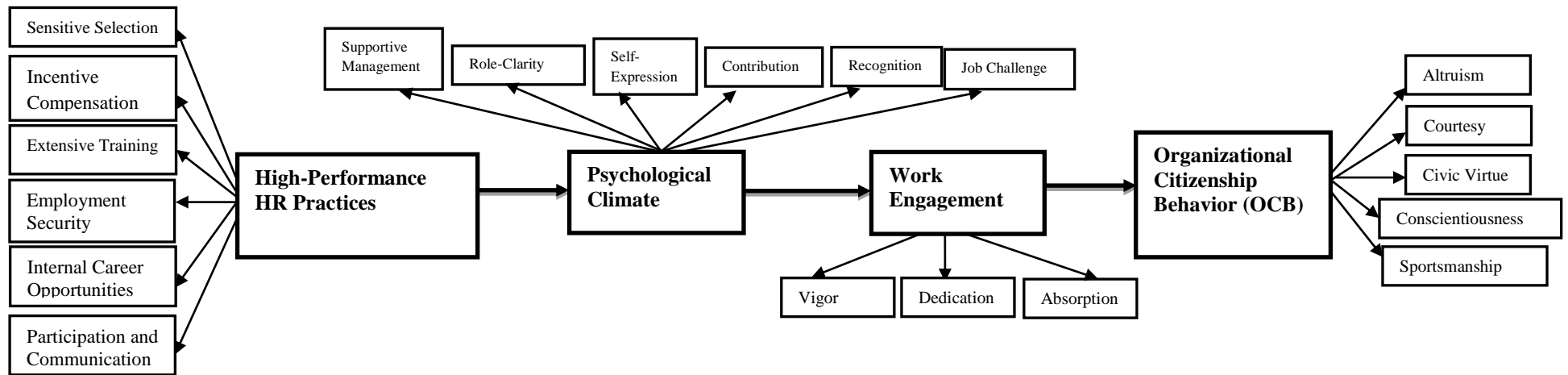


Legend: ICO- Internal Career Opportunities; ET- Extensive Training; ES- Employment Security; P&C- Participation & Communication; SS- Sensitive Selection; IC- Incentive Compensation; SM- Supportive Management; RC-Role-Clarity; SE-Self-Expression; RCG-Recognition; CON- Contribution; CH-Challenge; VIG- Vigor; DED- Dedication; AB- Absorption

3.3 SAMPLE

Convenience purposive sampling was used to collect data from employees working as software developers, programmers, team leaders, project managers, and administrative personnel in 25 IT organizations across the national capital region (NCR), India. A total of 490 questionnaires were distributed to selected participants. The questionnaires included instruments related to the selected variables: high-performance HR practices, psychological climate, work engagement, and OCB.

Figure 3.2: The Research Model (M1)



About 397 duly filled questionnaires were returned to the researcher. After preliminary screening, a sample set of 357 questionnaires was found suitable for the further analysis. The response rate to the survey was 72.85 %.

The mean age of the respondents was 34 years (SD=4.02) and the average work experience was 9.42 (SD = 3.72). 58.8 percent of the respondents were male and 41.2% were female participants. The work experience profile of the sample was: less than five years (47.33 per cent), between five years and ten years (22.33 per cent), and above ten years (28.33 per cent). Over 63.0 percent of participants had engineering degree, 30.8 percent of the sample had management degree, and doctorates accounted for 6.2 percent. Table 3.1 represents the demographic characteristics of the participants.

3.4 PROCEDURE AND DATA COLLECTION

The present study attempts to examine the precursors of OCBs in IT organizations. Primary data was used for this purpose, and a survey was carried by means of a self-administered and open ended scale.

Initially, a recommendation letter was drafted and sent to the heads of the companies and consent was gathered for data collection for the fulfillment of the requirement of the study. The data was collected personally by the researcher. While administering the tests, good rapport was established with the subject to get their maximum cooperation and to have best responses out of them. A cover letter delineating the research purpose, assurances of confidentiality, an emphasis on the voluntariness and anonymity of responses, and instructions for survey completion was attached with each questionnaire.

The questionnaire was made up of 67 survey items under four sections: High-performance HR Practices, Psychological Climate, Work Engagement, and OCB. The participants were asked to tick mark their choice. Scoring was done manually after receiving the responses in accordance with the instructions given in the manuals of the respective scale (attached with respective scale in Appendix 1). A brief description of the questionnaire has been given as under:

3.4.1 Personal Information Section

Personal information section included gender, age, marital status, educational qualifications, position in the organization, and job tenure.

Table 3.1 Demographic Characteristics of the Participants

Variables			
Age	Years	Number	(%)
	>30	105	29.4 %
	30-40	182	51.0%
	40<	70	19.6%
Gender			
	Male	210	58.8%
	Female	147	41.2%
Marital Status			
	Single	98	27.5%
	Married	259	72.5%
Education			
	Engineering Graduate	225	63.0%
	Management Graduate	110	30.8%
	Doctorate	22	6.2%
Work Experience			
	<5	169	47.3%
	5-10	87	24.3%
	10<	101	28.3%
Total		N 357	100%

(Note: source primary data)

3.4.2 High-Performance HR Practices

High-performance HR practices of the organization were measured using the 22-items high-performance HR practices scale developed by Wei, Han, & Hsu (2010). Participants were asked to assess the extent to which each one of the 22 items applied to his/her organization with a seven-point Likert Scale, ranging from 7 (strongly agree) to 1 (strongly disagree). This scale measures six different HR practices:

- (i) ***Internal career opportunities***- This measure the extent to which an organization has an internal ladder of career opportunities (e.g., our organization has a well-designed development program).
- (ii) ***Extensive training*** - This measures the extensiveness and formalization of the organization's training programs (e.g., our organization offers employees diverse training programs for different training needs).
- (iii) ***Employment security***- This measures the degree of employment security (e.g., expects employees to stay in organization as long as they wish).
- (iv) ***Participation and communication***- This measures the degree to which the organization values employees' input into their work (e.g., our organization keeps open communications with employees in their jobs).
- (v) ***Sensitive selection***- This measures the extent and complexity of selectivity in selection (e.g., our organization uses panel interviews to select new employees).
- (vi) ***Incentive compensation***- This measures whether employees' job performance is a determinant of their compensation (e.g., our organization has a competency-based pay system).

In the present study, the internal consistency reliability estimates for each of the sub-scales were observed as follows: internal career opportunities, $\alpha = 0.70$; extensive training, $\alpha = 0.65$; employment security, $\alpha = 0.64$, participation and communication, $\alpha = 0.82$, sensitive selection, $\alpha = 0.80$; incentive compensation, $\alpha = 0.85$. Reliability estimates for the combined scale was $\alpha = 0.93$.

3.4.3 Psychological Climate

Questions in this section dealt with the general feelings of participants about their work climate perception i.e. supportive management, role-clarity, self-expression, contribution, recognition, and challenge. The scale to measure psychological climate perception was drawn from the work of Brown & Leigh (1996). The scale contains 21 items and categorized into six dimensions:

- i. ***Supportive management***- measures the respondents' perceptions of flexibility and support provided by management with respect to task

accomplishments (e.g., my boss gives me the authority to do my job as I see fit).

- ii. **Role-clarity**- measures the extent to which employees perceive their work role to be clear and consistent (e.g., the amount of work responsibility and effort expected in my job is clearly defined).
- iii. **Self-expression**-measures whether employees feel psychologically safe in expressing core aspects of their self-concepts, (e.g., I feel free to be completely myself at work).
- iv. **Contribution**- measures the respondents' perceptions if their work significantly affects organizational processes and outcomes, (e.g., doing my job well really makes a difference).
- v. **Recognition**- measures the respondents' believes of the recognition of their work in organizations (e.g., I rarely feel my work is taken for granted).
- vi. **Challenge**- measures the perception of challenge and necessity of creativity in the work role (e.g., It takes all my resources to achieve my work objectives).

The respondents were asked to mark their choice that most appropriately describes their experience in the organizations. The response scale ranged from 1 ('strongly disagree') to 7 ('strongly agree'). In the present study, the internal consistency reliability estimates for each of the sub-scales were observed as follows: supportive management, $\alpha = 0.73$; role-clarity, $\alpha = 0.71$; contribution, $\alpha = 0.74$, recognition, $\alpha = 0.78$, self-expression, $\alpha = 0.79$; challenge, $\alpha = 0.68$. Reliability estimates for the combined scale was $\alpha = 0.85$.

3.4.4 Work Engagement

This section contains statements that measure the facets of participants' work engagement. An extensively validated 9-item Utrecht Work Engagement Scale (UWES-9) reported by Schaufeli et al. (2006) was used to measure work engagement. The scale measures three sub-dimensions (having three items each) of work engagement:

- i. **Vigor**- measures respondents' perceptions of positive affect in them in terms of positive energy and mental resilience (e.g., At my job, I feel strong and vigorous).

- ii. **Dedication**- measures the emotional framework of engagement, respondents' perceptions of significance and meaningfulness of work (e.g., I am proud of the work that I do).
- iii. **Absorption**- measures the extent to which respondents are engrossed in their work roles (e.g., I feel happy when I am working intensively).

All items relating to these three sub dimensions were measured on a seven-point Likert scale ranging from 1 = 'Never' to 7 = 'Always'. In the present study, the internal consistency reliability estimates for each of the sub-scales were observed as follows: vigor, $\alpha = 0.83$; dedication, $\alpha = 0.81$; absorption, $\alpha = 0.79$. Reliability estimates for the combined scale was $\alpha = 0.91$.

3.4.5. Organizational Citizenship Behaviour (OCB)

For measuring OCB, the OCB scale (Podsakoff & MacKenzie, 1989) was administered. This is a 15-item OCBQ divided into five components (indicating three items each) as identified by Organ (1988):

- i. **Altruism**- measures the extent to which respondents provide co-worker assistance when needed (e.g., I give my time to help others with work problems willingly).
- ii. **Courtesy**- measures the proactive gestures being displayed by the respondents in the wake of avoiding problems and sharing relevant information with others (e.g. I am mindful of how my behavior affects other people's job).
- iii. **Civic-virtue**- measures the extensiveness of involvement that respondents show in the political life of an organization (e.g., I keep up with developments in the company).
- iv. **Conscientiousness**- measures whether respondents abide themselves by behavioural norms at the workplace in terms of obeying rules, following timely breaks, and demonstrating punctuality etc. (e.g., I do not take unnecessary time off work).
- v. **Sportsmanship**- measures the extent to which respondents' willingly tolerate minor nuisances at work and do not overreact on petty issues (e.g., I consume a lot of time complaining about trivial matters (reverse coded)).

Of the 15 items, three items as 13, 14, and 15 are reverse scored. The response scale ranged from 1 ('strongly disagree') to 7 ('strongly agree'). In the present study, the internal consistency reliability estimates for each of the sub-scales were observed as follows: altruism, $\alpha = 0.79$; courtesy, $\alpha = 0.81$; civic-virtue, $\alpha = 0.78$, conscientiousness, $\alpha = 0.87$, sportsmanship, $\alpha = 0.78$. Reliability estimates for the combined scale was $\alpha = 0.92$.

3.5 CONTROL VARIABLES

Employee age, gender, education, and work experience were kept as control variables. Age was measured as a continuous variable. Employee gender was modeled as a categorical variable (0 – female, 1 – male). Education was modeled as a categorical variable (0 – graduates, 1 – postgraduates, 2 - others). Employee work experience was measured as years in service and was modeled as a continuous variable.

3.6 DATA ANALYSIS

Collected responses were analyzed by using SPSS[®]17 and AMOS[®]21. Data was checked for missing values (for each subject in the study, there must be related pairs of scores i.e. if a subject has a score on variable X, then the same subject must also have a score on variable Y), normality (the estimator is average neither high nor low), linearity (between variables the relationship can be most accurately represented by a straight line), reliability, non-multicollinearity and homoscedasticity (The variability of scores on the Y variable should remain constant at all values of the X variable).

Skewness and kurtosis scores were also calculated to measure the normality and the obtained skewness and kurtosis coefficient lies within the accepted range of ± 1 standard deviation. The analysis that study variables are negatively skewed revealed the existence of outliers but these outliers were within one standard deviation of the mean and were determined not to be a significant threat to normality. For linearity, scatter plots were drawn among predictor and criterion variables. The obtained plots ensured the occurrence of linearity among study variables. Cronbach alpha score was used to measure the reliability of the study measures. Variance inflation factor (VIF) score was calculated to determine the non-multicollinearity (the calculated VIF should remain below 10). All the independent variables had VIFs < 3 , which indicated no severe multicollinearity issue among independent variables.

To see the equality of error variance (homoscedasticity) studentized plot was graphed and the shape of the plot verified the assumption of homoscedasticity. Next to

this, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were employed to obtain the factor structure and fitness of the obtained factor pattern on the focused sample respectively.

In third phase of analysis, study hypotheses were tested. Multiple hierarchical regression was employed to test the hypothesized relationship between predictor variables and the criterion variable. Finally, SEM was run to test the research model of the study. Detailed descriptions of the results are given in chapter 4.

Chapter IV

Results & Discussion

The obtained data was subjected to a number of statistical analyses pertinent to research objectives of the study. The factor structure, reliability and validity of the instruments were ascertained by using EFA and CFA. Descriptive analysis was done next, and then the hypotheses' testing was made.

The verification of hypotheses (1, 2, and 3) was done using multiple hierarchical regression models. In the first multiple regression analysis for Hypothesis 1, the dependent variable was organizational citizenship behaviour (OCB) whereas high-performance HR practices in terms of internal career opportunities, extensive training, employment security, participation and communication, sensitive selection, and incentive compensation were considered as criterion variables. In second multiple regression analysis for Hypothesis 2, OCB was again studied as dependent variable and psychological climate constituents i.e. supportive management, role-clarity, self-expression, recognition, contribution, and challenge were treated as predictor variables. In third multiple regression analysis for Hypothesis 3, OCB was again studied as dependent variable and work engagement factors i.e. vigor, dedication, and absorption were treated as predictor variables.

Finally, hypothesis 4 was tested through SEM approach using AMOS 21.0. In hypothesis 4.1 of the study, the relationship between high-performance HR practices and psychological climate was tested. Hypothesis 4.2 considered the positive relationship between psychological climate and work engagement. Hypothesis 4.3 considered the influence of high-performance HR practices on work engagement. To test the mediating effect of psychological climate and work engagement in the relationship between high-performance HR practices and OCB (Hypothesis 4.4 and 4.5), two alternative structural models were compared to the research model using Chi square difference test.

4.1 PRELIMINARY SCREENING OF DATA

The **Table 4.1** shows the calculated coefficient for normality (i.e. skewness and kurtosis), reliability (i.e. Cronbach alpha) and non-multicollinearity (VIF). The results revealed that one variable high-performance HR practices is negatively skewed and psychological climate, work engagement, and OCB are positively skewed, but these coefficients were within one standard deviation of the mean and were determined not to be a significant

threat to normality. The data were tested for non-multicollinearity assumption. Variance inflation factors (VIF) was found to be less than 10, indicating non-multicollinearity.

Table 4.1 Normality, Reliability and Non-Multicollinearity Coefficients

N 357	Skewness		Kurtosis		Croanbach alpha	VIF
	Statistic	SE	Statistic	SE		
HPHRPs	-0.222	0.129	0.652	0.257	0.95	1.153
PC	0.192	0.129	0.514	0.257	0.76	1.034
WE	0.180	0.129	0.623	0.257	0.61	1.442
OCB	0.212	0.129	0.564	0.257		

(Source: Primary data, N (Number of participants) 357, SE standard error, VIF variance inflation factor, significance level <0.05)

4.2 FACTOR STRUCTURE OF THE INSTRUMENTS

Before applying factor analysis, data corresponding to the different constructs was checked for internal consistency, item-total correlation, variance, item means following De Vellis (1991) recommendations. The items relating to each particular construct were subjected to correlation analyses so as to establish internal consistency. High correlation among items shows that items are all measuring the same construct leading to internal consistency. Individual item reliabilities were checked and only those items were retained which correlated at least 0.3 with at least one other item. Next, items with item-total correlation with a value less than 0.2 were marked for deletion from the set. Further, means of the items were checked for their proximity to the center of the range of possible scores. In addition, items were analyzed for their removal from the set if they had the least negative effect and more positive effect on α of the scale.

The basic assumptions for conducting EFA were met. Based on a strong conceptual foundation, items all support the assumption that a structure does exist before proceeding for factor analysis. The Kaiser- Meyer- Olkin measure of sampling adequacy was near to one which indicated that the pattern of correlations was condensed, and Bartlett's test of sphericity was also significant. The factor loadings of 0.40 or less were eliminated (Price and Mueller (1986). These considerations facilitated appropriate conditions for the application of EFA and to understand the underlying structure of the variables.

The goal of rotation is to provide a better approximation to a simple structure of variables. Since the aim of EFA was to clarify and conclude most of the original

information in a minimum possible number of factors. Principal component analysis using varimax rotation criterion (depending upon the nature of correlations among the underlying latent variables of different constructs) was carried out. Items which were observed as having low single significant loading were further marked for deletion. Items with cross-loadings of values above 0.40 on two different factors were deleted provided that the difference between weights for these items was less than .10 across factors.

The next stage involves assessing the generalizability of the scales to the population under study. The best-fitting models identified from the EFA were subsequently selected for CFA by using AMOS 21.0. Confirmatory Factor Analysis (CFA) is a more rigorous procedure which assesses the construct validity and unidimensionality of construct while specifying the relationship of the observed measures to their underlying constructs. The following section discusses the results of the factor analysis of each scale and subscales.

4.2.1 Exploratory Factor Analysis (EFA) of the High-Performance HR Practices Scale

The items measuring high-performance HR practices in IT organizations were factor analyzed. The Kaiser- Meyer- Olkin measure of sampling adequacy was 0.958, which is well above the recommended value of 0.6, and Bartlett's test of sphericity was significant ($\chi^2 (171) = 5287, p < 0.001$). Additionally, all communality values were well above 0.50, confirming that each item shared some common variance with other item. Given these indicators, factor analysis was conducted on the scores obtained from 22 items of the scale. Principal component analysis using varimax rotation criterion was carried out. Six factors were extracted with an eigenvalue of greater than 1 together accounting for 56.42 % of the total variance in the sample. The items of each high-performance HR practices dimension strongly loaded on a separate factor. However, two items strongly loaded either on several factors or on factors that they could not be logically attributed to. Hence, they did not contribute to a simple factor structure. The item, for e.g.: "Our organization involves employees in calculating their compensation base" had factor loadings between .46 and .50 on both Participation and Communication and Incentive Compensation factors. The difference between weights for this item was less than .10 across factors. Another item, "Our organization considers the similarity of candidate's personality and organizational culture" did not load in Sensitive Selection factor where it was assumed to belong to and had a primary factor loading of 0.42 on the Extensive Training factor (which was well defined by 4 other factors) and a cross loading of 0.46 on Internal Career Opportunities for

varimax solution. These two items were found to be nuisance items due to cross loadings and hence were eliminated from the final scale.

Principal component factor analysis of the remaining 20 items, using varimax rotation was conducted, resulting in a reliability of 0.89 % and the six factors explaining a total variance of 59.47 %. The factor loadings for this final solution along with eigenvalues and percentage of variance explained by each factor are shown in **Table 4.2**. Based on clustering/grouping of items, factor labels proposed by the authors suited the extracted six factors and therefore retained.

Table 4.2 Variables Included in Each Factor and Factor Loadings.

Factor/Items	1	2	3	4	5	6
Internal Career Opportunities						
1. Our organization fills vacancies with people already employed at the organization.	0.48					
2. Our organization has a well-designed development program.	0.76					
Extensive Training						
3. Our organization offers employees diverse training programs for different training needs.		0.71				
4. Our organization structures training process systematically.		0.67				
5. Our organization encourages employees to undertake continuous training.		0.72				
6. Our organization provides individuals extensive training programs in order to increase general skills.		0.67				
Employment Security						
7. Our organization provides employees with job security.			0.72			
8. Our organization expects employees to stay in organization as long as they wish.			0.68			
Participation and Communication						
9. Our organization emphasizes employee participation.				0.62		
10. Our organization provides employees the opportunity to suggest improvements in the way things are done.				0.71		
11. Our organization keeps open communications with employees in their jobs.				0.68		
12. Our organization allows employees to participate in many decisions.				0.67		
Sensitive Selection						
13. Our organization makes extensive efforts to select the right person.					0.68	
14. Our organization uses panel interviews to select new employees.					0.67	
15. Our organization adopts fair procedures in selection.					0.59	
16. Our organization emphasizes employee prior work experiences.					0.69	
Incentive Compensation						
17. Our organization has a competency-based pay system.						0.71
18. Our organization offers bonuses based on team performance.						0.67
19. Our organization offers pay levels competitive with those of competitors.						0.67
20. Our organization grants bonuses based on the profit of the organization.						0.69
Eigen values	4.72	4.17	3.50	2.68	2.66	2.65
Percentage of Variance Explained	14.82	11.67	9.04	8.34	7.49	7.01

4.2.2 Confirmatory Factor Analysis (CFA) of the High-Performance HR Practices Scale

The six-factor model derived from the EFA was then evaluated using confirmatory factor analysis to see the fitness of the High-Performance HR Practices scale on the present sample. Three different factor structures were tested for the model fit. **First**, a one factor model which does not differentiate between the factors and assumes high-performance HR practices to be a one-dimensional construct was tested. **Second**, the six factor model which tested whether the six factors were correlated. **Third**, a higher order model as shown in Figure 4.1 tested the notion that the relationship between the six factors was accounted for by a second order factor. It defined six primary factors and a secondary factor as depicted in Figure 4.1.

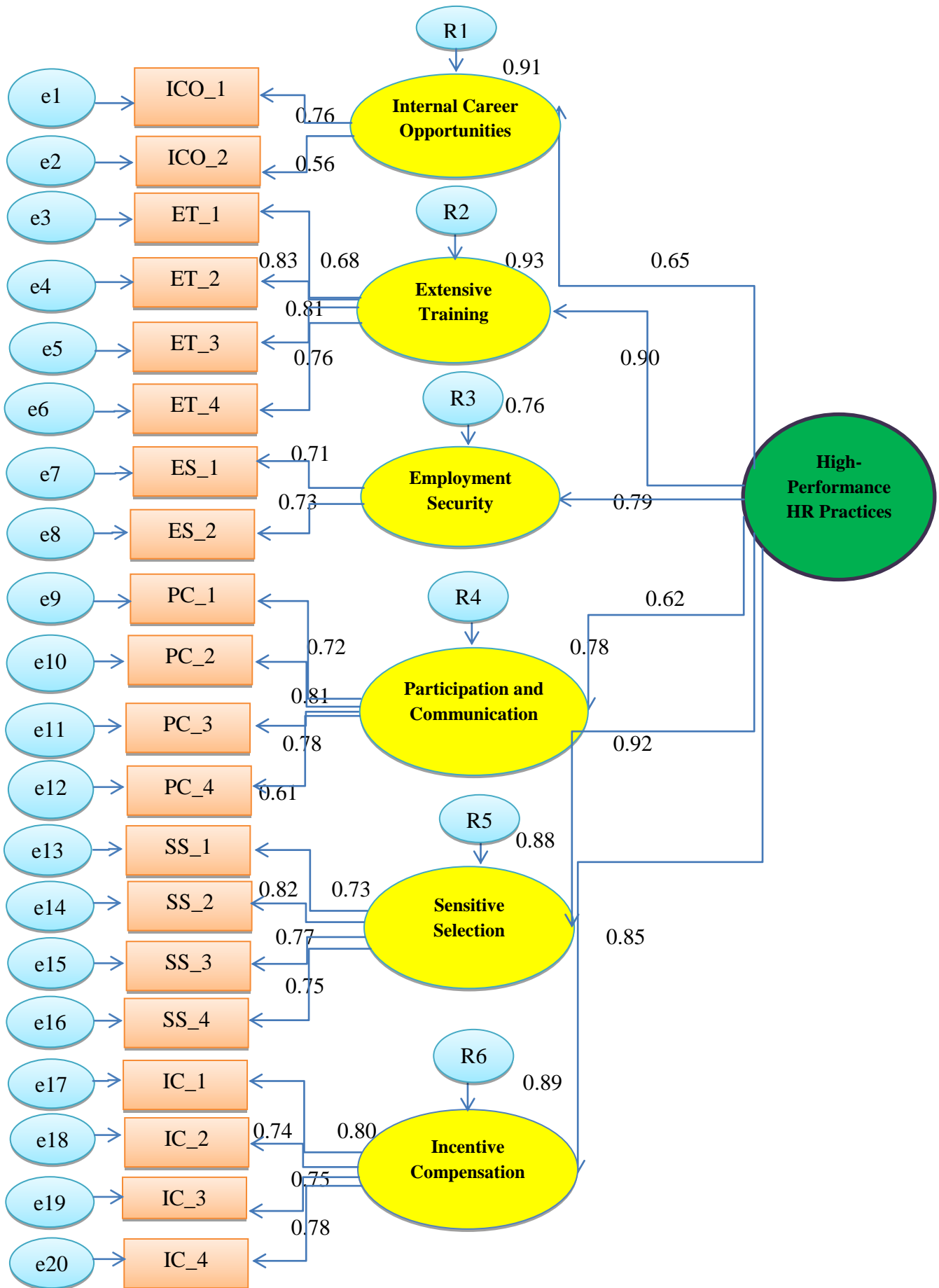
Table 4.3 Confirmatory Factor Analysis of Alternative Models

Model	χ^2	df	χ^2/df	p	NFI	TLI	CFI	RMSEA
One-factor	708.92	170	4.17	.00	.86	.87	.89	.09
Six-factor correlated	396.00	155	2.55	.00	.93	.94	.94	.06
Second-order Model	412.07	164	2.51	.00	.91	.95	.96	.05

Note: *p. < 0.001

Table 4.3 shows fit indices for each of the three models. As it is evident from the table, the higher order model best fit the data. In addition it can also be noticed that correlated six-factor model also showed acceptable data fit. However, the one-factor model did not show the acceptable model fit with NFI, TLI, CFI values less than .90 and RMSEA values greater than .80. On this basis, the higher-order model was retained to measure high-performance HR practices in further analyses. **Figure 4.1** explain the pattern of the high-performance HR practices scale.

Figure 4.1 Measurement Model for High-Performance HR Practices.



4.2.3 Exploratory Factor Analysis (EFA) of the Psychological Climate Scale

Items pertaining to psychological climate construct were subjected to an exploratory factor analysis yielding six factors. The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.914, and Bartlett's test of sphericity with approximated chi square value (χ^2 (210) = 2547, $p < 0.001$) was significant. Principal component analysis using varimax rotation criterion was carried out. Six factors were extracted with an eigenvalue of greater than 1 together accounting for 58.82 % of the total variance in the sample. All item total correlations were above 0.30 in all cases. All communality values ranged between .478 and .778 confirming that each item shared some common variance with other item. Deletion of an item "I rarely feel my work is taken for granted" for low factor loading resulted in a six-factor solution comprising of 20 items. The item did not meet .40 criterion as the minimum cut off to make certain that it represented the construct underlying respective factor. Subsequently, examining this item, its mean was observed as disturbingly low, indicating sporadic usage, and thereby confining the ranges. The six-factor solution was retested after removal of this item explaining 60.26 % of the total variance in the sample. The items loading on the six-factors were essentially the same as those in the original solution described by the Brown & Leigh (1996). The factor loadings for this final solution along with eigenvalues and percentage of variance explained by each factor are shown in **Table 4.4**. The terms were used from the original scale to define extracted factors.

4.2.4 Confirmatory Factor Analysis (CFA) of the Psychological Climate Scale

In order to corroborate the factor structure of psychological climate construct obtained as a result of exploratory factor analysis, scale comprised of its respective items were evaluated using confirmatory factor analysis. Three different factor structures were tested for the model fit. First, a one factor model which does not differentiate between the factors and assumes psychological climate to be a one-dimensional construct was tested. Second, the six factor model which tested whether the six psychological climate factors were correlated. Third, psychological climate scale was modelled as a higher order factor model with its respective items as reflective indicators of latent first order factors (supportive management, role-clarity, self-expression, recognition, contribution, challenge) as shown in **Figure 4.2**. **Table 4.5** provides the Results of CFA analysis.

Table4.4 Variables Included in Each Factor and Factor Loadings

Factor/Items	1	2	3	4	5	6
Supportive Management						
1. My boss is flexible about how I accomplish my job objectives.	0.51					
2. My manager is supportive of my ideas and ways of getting things done.	0.64					
3. My boss gives me the authority to do my job as I see fit.	0.63					
4. I'm careful in taking responsibility because my boss is often critical of new ideas.	0.41					
5. I can trust my boss to back me up on decisions I make in the field.	0.56					
Role Clarity						
6. Management makes it perfectly clear how my job is to be done.		0.64				
7. The amount of work responsibility and effort expected in my job is clearly defined.		0.65				
8. The norms of performance in my department are well understood and communicated.		0.66				
Self-Expression						
9. The feelings I express at work are my true feelings.			0.46			
10. I feel free to be completely myself at work.			0.64			
11. There are parts of myself that I am not free to express at work.			0.41			
12. It is okay to express my true feelings in this job.			0.66			
Contribution						
13. I feel very useful in my job.				0.60		
14. Doing my job well really makes a difference.				0.47		
15. I feel like a key member of the organization.				0.68		
16. The work I do is very valuable to the organization.				0.54		
Recognition						
17. My superiors generally appreciate the way I do my job.					0.71	
18. The organization recognizes the significance of the contributions I make.					0.69	
Challenge						
19. My job is very challenging.						0.58
20. It takes all my resources to achieve my work objectives.						0.67
Eigen values	6.92	1.50	1.44	1.25	1.13	1.05
Percentage of Variance Explained	17.38	12.13	10.04	8.42	6.55	5.72

Figure 4.2 Measurement Model for Psychological Climate

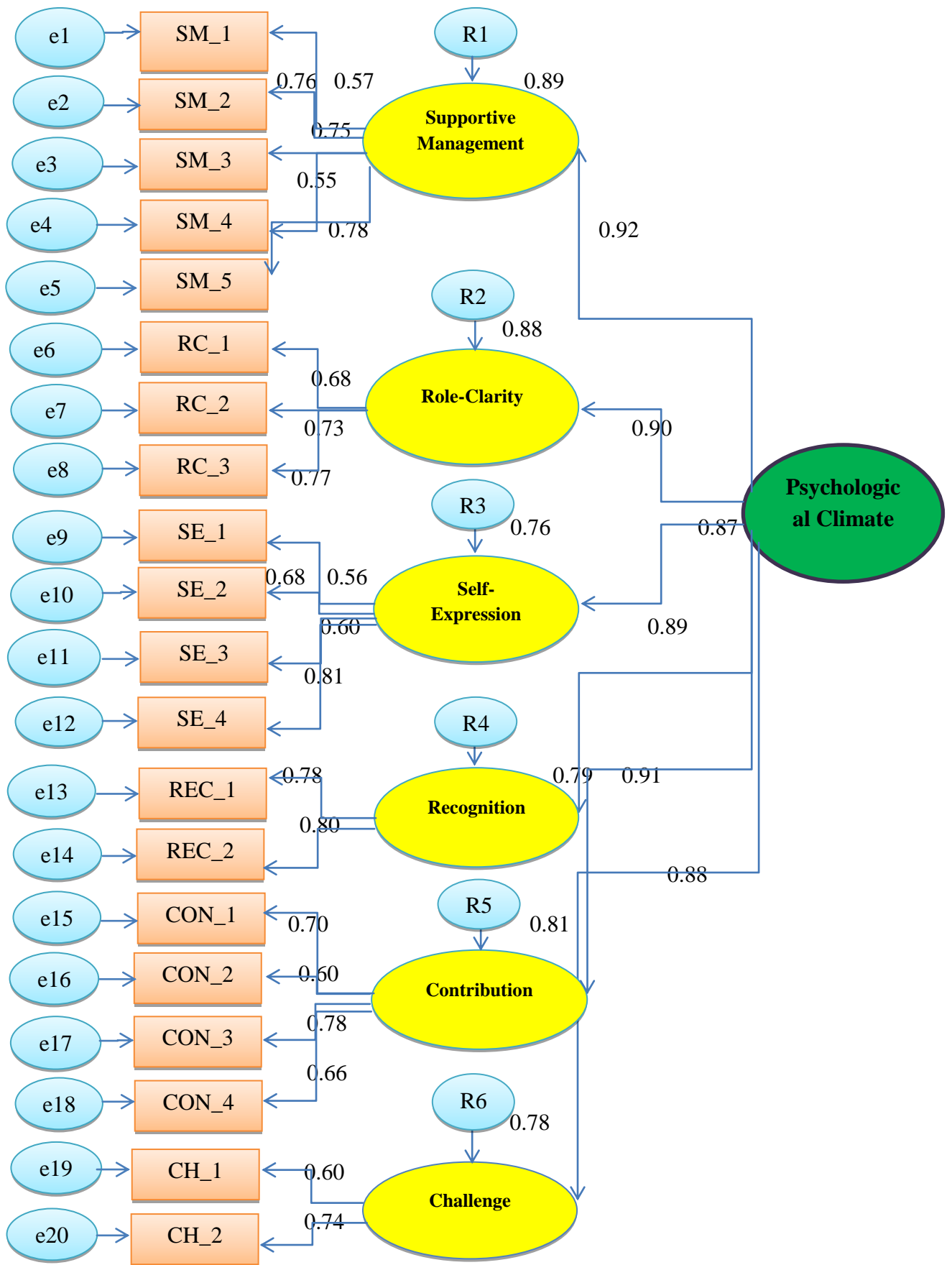


Table 4.5 Confirmatory Factor Analysis of Alternative Models

Model	χ^2	df	χ^2/df	p	NFI	TLI	CFI	RMSEA
One-factor	623.97	170	3.67	.00	.751	.782	.806	.087
Six-factor correlated	465.42	155	3.00	.00	.933	.953	.970	.064
Higher-order Model	465.86	164	2.84	.00	.918	.927	.949	.074

Note: *p. < 0.001

Table 4.5 shows fit indices for each of the three models. As it is evident from the table, the higher-order model of psychological climate best fit the data. In addition it can also be noticed that the correlated six-factor model also showed acceptable data fit. However, the one-factor model did not show the acceptable model fit with NFI, TLI, CFI values less than .90 and RMSEA values greater than .80. On this basis, the higher-order factorial structure of psychological climate scale was retained in the study for measuring psychological climate perceptions.

4.2.5 Exploratory Factor Analysis (EFA) of the Work Engagement Scale

The study verifies the factor structure of work engagement. Factor analysis was conducted on the scores obtained from a total of nine items for work engagement. The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.927, which is well above the recommended value of 0.6, and Bartlett's test of sphericity was also significant ($\chi^2 (171) = 5287, p < 0.001$). In addition, all communality values were well above 0.50, confirming that each item shared some common variance with other item. Given these considerations, Principal component analysis with oblique rotation criterion was carried out. Oblique rotation criterion was used because work engagement variables have been reported to be highly correlated (Schaufeli et al., 2002, 2006). The factor analysis for work engagement resulted into a three factorial structure of work engagement organized as vigor, dedication, and absorption with eigenvalue of greater than 1 together accounting for a cumulative variance of 61.55 % in the sample. The item analyses of the responses revealed that removing any of the items did not result in any improvement in Cronbach's alpha value.

Table 4.6 Variables Included in Each Factor and Factor Loadings

Factor/Items	1	2	3
Vigor			
1. At my work, I feel bursting with energy.	0.67		
2. At my job, I feel strong and vigorous.	0.84		
3. When I get up in the morning, I feel like going to work.	0.46		
Dedication			
4. I am enthusiastic about my job.		0.57	
5. My job inspires me.		0.62	
6. I am proud of the work that I do.		0.52	
Absorption			
7. I feel happy when I am working intensively.			.58
8. I am immersed in my work.			.69
9. I get carried away when I am working.			.57
Eigen values	3.54	1.57	1.05
Percentage of Variance Explained	39.39	11.53	10.63

4.2.6 Confirmatory Factor Analysis (CFA) of the Work Engagement Scale

Table 4.7 summarizes the results of CFA runs for work engagement. Three different factor structures were tested for the model fit. First, a one-factor model was specified which does not differentiate between the factors and assumes work engagement to be a one-dimensional construct was tested. Second, the three factor model which tested whether the three factors were correlated. Third, a higher order model as shown in **Figure 4.3** tested the notion that the relationship between the three factors was accounted for by a second order factor was implemented. It defined six primary factors and a secondary factor as can be seen in **Figure 4.3**.

Table 4.7 Confirmatory Factor Analysis of Alternative Models

Model	χ^2	df	χ^2/df	p	NFI	TLI	CFI	RMSEA
One-factor	131.72	27	4.86	.00	.81	.91	.84	.11
Three-factor correlated	61.23	24	2.55	.00	.91	.90	.92	.05
Second-order	54.51	24	2.27	.00	.93	.93	.95	.05

Note: *p. < 0.001

Figure 4.3 Measurement Model for Work Engagement

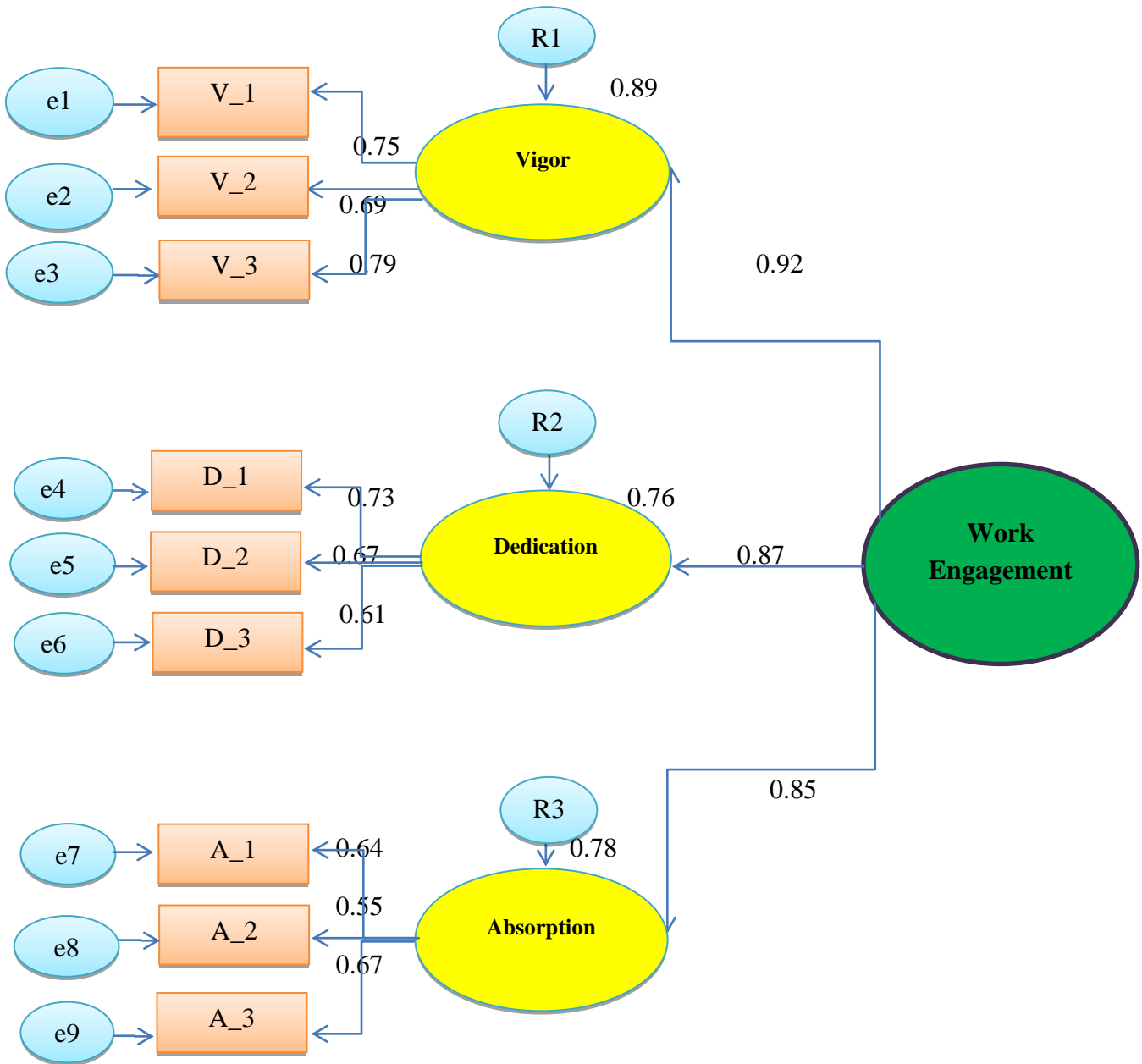


Table 4.7 shows fit indices for each of the three models. As it is evident from the table, the higher-order model of work engagement best fit the data. In addition it can also be noticed that the correlated six-factor model also showed acceptable data fit. However, the one-factor model did not show the acceptable model fit with NFI, TLI, CFI values less than .90 and RMSEA values greater than .80. All items loaded significantly on latent factors of UWES-9 ($p < .001$) with the magnitude ranging from .43 to .88 and the three factors were found to be moderately highly correlated ($r = .62-.78$, $p < .01$). On this basis, the higher-order factorial structure of work engagement scale was retained in the study for measuring employees' engagement with their work.

4.2.7 Exploratory Factor Analysis (EFA) of the Organizational Citizenship Behaviour (OCB) Scale

As a validity check on the conceptual nature of the OCB instrument, exploratory factor analysis (EFA) was performed. The results of both the KMO sampling adequacy test (.958) and Bartlett's test of sphericity ($\chi^2 (105) = 1311$, $p < 0.001$) were acceptable to proceed with the factor analysis. Principal component analysis with varimax rotation criterion was conducted. Five factors were extracted with an eigenvalue of greater than 1 together accounting for 66.84 % of the total variance in the sample. The items of each OCB dimension strongly loaded on a separate factor organized as altruism, courtesy, civic-virtue, conscientiousness, and sportsmanship resulting into the same composition of the OCB scale as the original one. The item analyses of the responses revealed that removing any of the items did not result in any improvement in Cronbach's alpha value. Scales comprised of their respective items were evaluated using confirmatory factor analysis.

4.2.8 Confirmatory Factor Analysis (CFA) of Organizational Citizenship Behaviour (OCB) Scale

Scales comprised of their respective items were evaluated using confirmatory factor analysis. Four different factor structures were tested for the model fit. First, a one factor model which does not differentiate between the factors and assumes OCB to be a one-dimensional construct was tested. Second, the five-factor model tested whether the five factors were correlated. Third, a higher order model which tested the notion that the relationship between the five factors was accounted for by a second order factor was implemented. It defined five primary factors and a secondary factor as can be seen in **Figure 4.4**.

Table 4.9 summarizes the results of CFA runs for OCB. As it is evident from the table, the higher-order model of OCB fit the data. It can be noticed that the correlated six-factor model and the one-factor model did not show the acceptable model fit with NFI, TLI, CFI values less than .90 and RMSEA values greater than .80. On this basis, the higher-order factorial structure of OCB scale was retained in the study for measuring employees' citizenship performance at work.

Table 4.8 Variables Included in Each Factor and Factor Loadings

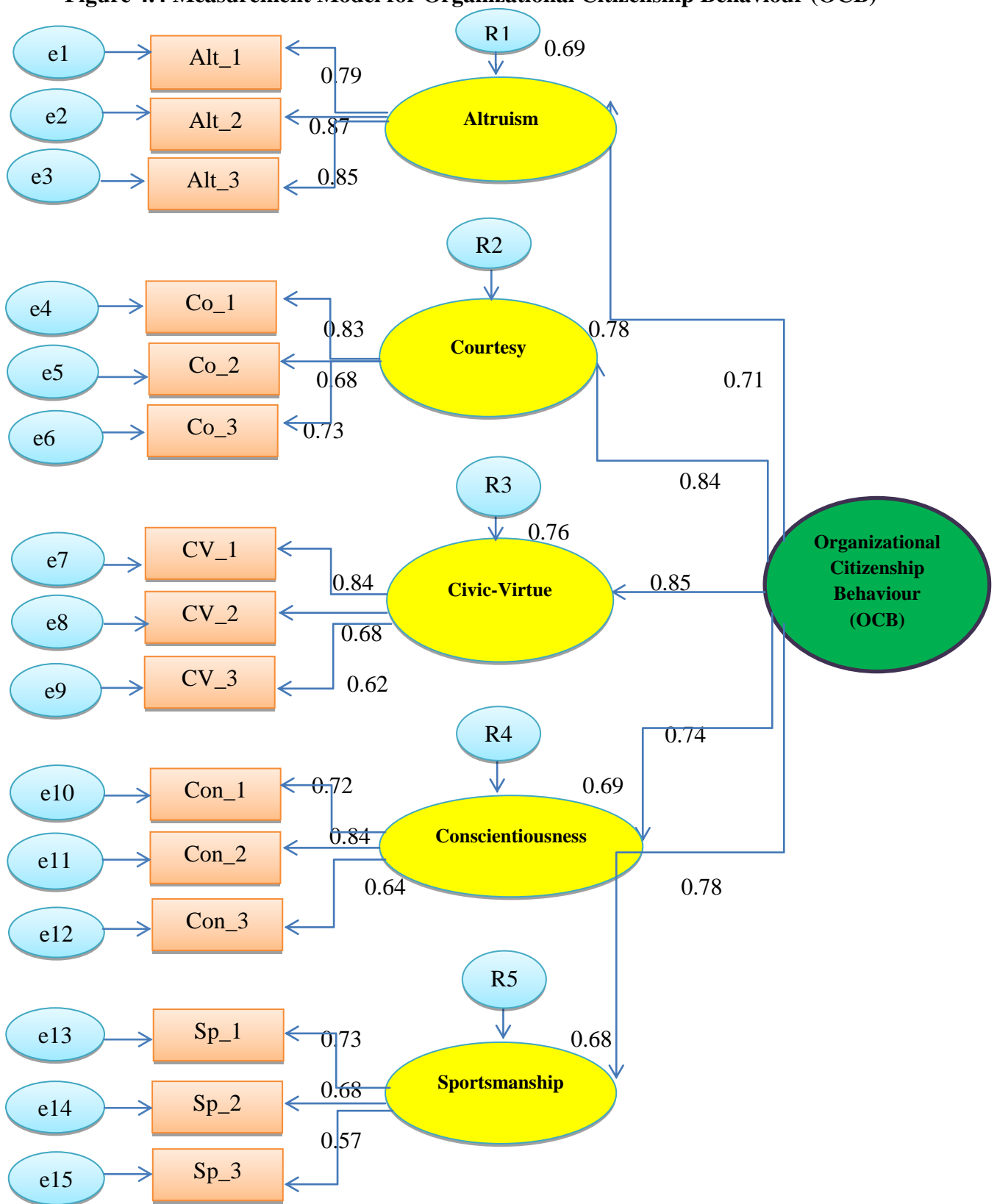
Factor/Items	1	2	3	4	5
Altruism					
1. I help others who have heavy workloads.	0.69				
2. I give my time to help others with work problems willingly.	0.67				
3. I help others who have been absent.	0.76				
Courtesy					
4. I take steps to prevent problems with other workers.		0.53			
5. I try to avoid creating problems for co-workers.		0.71			
6. I am mindful of how my behavior affects other people's job.		0.63			
Civic-Virtue					
7. I keep up with developments in the company.			0.65		
8. I keep abreast of changes in the organization.			0.72		
9. I read and keep up with organization memos, announcements, etc.			0.63		
Conscientiousness					
10. I do not take extra breaks.				0.68	
11. I do not take unnecessary time off work.				0.69	
12. My attendance at work is above the norm.				0.47	
Sportsmanship					
13. I consume a lot of time complaining about trivial matters.					0.73
14. I tend to make "mountains" out of molehills.					0.68
15. I always find fault with what the organization is doing.					0.65
Eigen values	4.03	1.85	1.55	1.32	1.27
Percentage of Variance Explained	14.36	27.99	41.38	54.19	68.85

Table 4.9 Confirmatory Factor Analysis of Alternative Models

Model	χ^2	df	χ^2/df	p	NFI	TLI	CFI	RMSEA
One-factor	989.16	90	10.99	.00	.329	.234	.343	.182
Five-factor correlated	352.19	80	4.40	.00	.878	.871	.902	.087
Higher-order Model	260.90	85	3.06	.00	.900	.944	.955	.079

Note: *p. < 0.001

Figure 4.4 Measurement Model for Organizational Citizenship Behaviour (OCB)



4.3 TEST OF SUBSTANTIVE RELATIONSHIP

After establishing the reliability and validity of measurement models, hierarchical regression analyses (to examine the hypothesized relationships of H1 through H3) were conducted adopting the stepwise method, which establish the contribution of each independent variable to the regression models. Next, Structural Equation Modeling (SEM) approach was adopted to test the hypothesis 4 (4.1, 4.2, 4.3, 4.4, 4.5). The proposed study is based on a recursive structural model (see **Figure 3.2**), analyzed using AMOS 20.0. The Statistical analysis included structural equation modeling approach, a two-stage methodology: the measurement model and the structure model recommended by Anderson and Gerbing (1988). Measurement model was tested using confirmatory factor analysis (CFA) of the relationships between the indicators and their respective latent variables. Next, three competitive structural models allowed us to test the study hypotheses: a) the full research mediating model (M1), b) the partial mediating model (M2), c) and an alternative model (M3).

Maximum likelihood estimation (MLE) algorithm was used to determine the fit indices. Appropriateness of the models was assessed by applying the absolute and relative indices. The absolute goodness-of fit indices including 1) the χ^2 goodness-fit statistics; 2) the Root Mean Square Error of Approximation (RMSEA); 3) the Goodness of fit Index (GFI); 4) the Adjusted Goodness of Fit Index (AGFI) were calculated. RMSEA values of up to .08 are judged as having an acceptable fit (Jöreskog & Sörbom, 1996). The Goodness-of-Fit Index (GFI) and Adjusted Goodness-of-Fit Index (AGFI), in which an acceptable value is 0.90 and values close to 0.95 indicate good model fit. A non-significant value of χ^2 indicates the hypothesized model fits the data. However, with regard to large sample base, χ^2 has its limitations in rejecting the good-fitting models on the basis of poor evaluation (Giorgi, 2010). To get the better of these fit indices, the computation of relative goodness-fit- indices 1) Tucker Lewis Index (TLI); 2) Incremental Fit Index (IFI); 3) Comparative Fit Index (CFI) is strongly recommended (Bentler, 1990). Values close to 0.95 for all the three relative-fit-indices indicate good fit (Hu & Bentler, 1999; Kline, 2005; Wijhe et al., 2011).

4.4 COMMON METHOD BIAS

Given that the data collection technique employed in the current study was cross sectional self-reports, common method bias was a concern. To address the extent of this problem,

we considered the recommendations of Podsakoff et al., (2003). Consequently, a confirmatory factor analysis (CFA) was conducted for the study variables to implement the Harman's single-factor test. All the items from scales used in this study were loaded on a single-factor. If the results indicate that the single factor model fits the data well and that this general model accounts for a disproportionate large variance, then common-method bias is a serious concern in this study. However, if a single-factor model does not fit the data, common method variance bias is not a serious deficiency in this study. The output of CFA produced the following fit statistics: $\chi^2 = 3.57$, $p < .05$; NFI = 0.50; CFI = 0.58; and RMSEA= 0.11. The fit statistics showed that the 1-factor model did not fit the data. The results of these analyses suggest that one single factor cannot account for the variance in the data and so we cannot consider the common method variance to be a serious concern in this dataset and thus is unlikely to confound the interpretation of results.

Table 4.10 Descriptive statistics of study variables

Variables	Mean	Standard Deviation
Internal career opportunities	3.16	.815
Extensive training	3.14	.961
Employment security	3.23	.945
Participation and communication	3.04	1.023
Sensitive Selection	3.28	1.043
Incentive compensation	3.19	.884
High-performance HR practices	3.17	.817
Supportive management	3.55	.674
Role clarity	3.55	.725
Self-expression	3.63	.629
Recognition	3.26	.731
Contribution	3.93	.664
Challenge	3.78	.777
Psychological climate	3.61	.567
Vigor	3.31	.750
Dedication	3.58	.737
Absorption	3.69	.740
Work engagement	3.53	.674
Altruism	3.44	.783
Courtesy	3.65	.670
Civic-Virtue	3.68	.648
Conscientiousness	3.45	.767
Sportsmanship	2.69	.675
Organizational citizenship behavior (OCB)	3.38	.588

Table 4.10 presents the results of descriptive statistics (mean and standard deviation) of high-performance HR practices and its subscales, psychological climate and its subscales, work engagement and its subscales, and OCB and its subscales. The values of correlation analysis of scales and subscales with criterion variable are listed in Table 4.11. The results indicated that high-performance HR practices, psychological climate, and work engagement were positively and significantly correlated with OCB (high-performance HR practices and OCB = .42**, psychological climate and OCB = .44**, work engagement and OCB = .47; $p < .01$ two tailed). The association between high-performance HR practices and psychological climate ($r = .55^{**}$), high-performance HR practices and work engagement ($r = .70^{**}$), and psychological climate and work engagement ($r = .63^{**}$) was also found positive, $p < .01$ two tailed. Additional analysis was conducted to explore the relationships between subscales of high-performance HR practices, psychological climate, work engagement, and OCB. Positive and significant correlation was observed between the subscales of high-performance HR practices, psychological climate, work engagement, and OCB, though the strength of observed associations was slightly low.

4.5 HIERARCHICAL REGRESSION ANALYSIS

4.5.1 The Role of High-Performance HR Practices on OCB

The role of high-performance HR practices on OCB was examined to test hypothesis 1. To reveal deep insights of the issue, functions of all six high-performance HR practices factors on OCB were tested. A hierarchical multiple regression analysed whether different high-performance HR practices i.e. internal career opportunities, extensive training, employment security, participation and communication, sensitive selection, incentive compensation made a significant contribution to the variance in the OCB after controlling for the demographic variables i.e. age, gender, education, and work experience. The predictor variables were entered as follows: step one control variables (age, gender, education, and work experience), step two: step one + internal career opportunities, step three: step two + extensive training, step four: step three+ employment security, step five: step four + participation and communication, step six: step five + sensitive selection, step seven: step six + incentive compensation. **Table 4.12** presented the results of hierarchical multiple regression analysis.

Table 4.11 Intercorrelations among Study Constructs and their Reliability (N=357)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
ICO	(0.70)																							
ET	.753**	(0.65)																						
ES	.788**	.861**	(0.64)																					
P&C	.745**	.825**	.818**	(0.82)																				
SS	.549**	.663**	.652**	.654**	(0.80)																			
IC	.747**	.838**	.816**	.832**	.682**	(0.85)																		
HPHRPs	.848**	.925**	.922**	.915**	.802**	.918**	(0.93)																	
SM	.316**	.294**	.291**	.295**	.256**	.367**	.339**	(0.73)																
RC	.504**	.510**	.569**	.479**	.436**	.508**	.562**	.505**	(0.71)															
SE	.313**	.365**	.386**	.335**	.279**	.379**	.385**	.522**	.473**	(0.74)														
REC	.414**	.435**	.454**	.424**	.385**	.435**	.477**	.581**	.589**	.510**	(0.78)													
CON	.298**	.303**	.340**	.250**	.271**	.313**	.332**	.492**	.485**	.503**	.551**	(.79)												
CH	.350**	.359**	.368**	.341**	.204**	.373**	.370**	.378**	.447**	.489**	.392**	.514**	(0.68)											
PC	.486**	.501**	.532**	.471**	.402**	.524**	.545**	.755**	.773**	.757**	.793**	.767**	.720**	(0.85)										
VIG	.544**	.581**	.571**	.566**	.471**	.556**	.616**	.319**	.428**	.279**	.430**	.270**	.225**	.429**	(0.83)									
DED	.498**	.547**	.548**	.511**	.415**	.565**	.576**	.520**	.528**	.468**	.480**	.472**	.396**	.626**	.610**	(0.81)								
AB	.550**	.624**	.613**	.568**	.458**	.638**	.645**	.489**	.489**	.464**	.484**	.441**	.435**	.614**	.574**	.779**	(0.79)							
WE	.605**	.667**	.658**	.626**	.512**	.669**	.699**	.503**	.549**	.459**	.530**	.448**	.400**	.633**	.733**	.705**	.793**	(0.91)						
ALT	.293**	.380**	.371**	.368**	.328**	.384**	.400**	.245**	.349**	.276**	.309**	.221**	.208**	.353**	.349**	.358**	.343**	.399**	(0.79)					
COU	.370**	.400**	.405**	.376**	.352**	.429**	.437**	.368**	.372**	.344**	.410**	.323**	.233**	.447**	.379**	.436**	.454**	.482**	.564**	(0.81)				
CV	.362**	.429**	.376**	.363**	.332**	.427**	.428**	.337**	.410**	.300**	.361**	.335**	.260**	.439**	.344**	.435**	.468**	.474**	.497**	.560**	(0.78)			
CONS	.246**	.267**	.218**	.226**	.265**	.312**	.288**	.275**	.360**	.256**	.256**	.271**	.294**	.377**	.290**	.317**	.335**	.358**	.489**	.579**	.503**	(0.87)		
SP	.137**	.104*	.129*	.099	.029	.021	.096	.049	.052	.015	.073	.023	.139**	.081	.124*	.067	.058	.095	.035	.079	.027	.139**	(0.78)	
OCB	.325**	.394**	.356**	.355**	.361**	.441**	.419**	.337**	.417**	.335**	.362**	.323**	.250**	.442**	.358**	.425**	.441**	.465**	.766**	.799**	.717**	.801**	.355**	(0.92)

(Note: source primary data, 2 tailed Pearson correlation coefficient, *p<0.05, **p<0.01)

Legend: ICO- Internal Career Opportunities; ET- Extensive Training; ES- Employment Security; P&C- Participation & Communication; SS- Sensitive Selection; IC- Incentive Compensation; HPHRPs- High-performance HR Practices; SM-Supportive Management; RC-Role-Clarity; RCG-Recognition; CON-Contribution; SE-Self-Expression; CH- Challenge; VIG- Vigor; DED- Dedication; AB- Absorption; WE- Work Engagement; ALT- Altruism; COU- Courtesy; CV- Civic-Virtue; CONS- Conscientiousness; SP- Sportsmanship; OCB- Organizational Citizenship Behaviour.

Table 4.12 Results of Hierarchical Regression Analysis (PV High-Performance HR Practices Factors, DV Organizational Citizenship Behaviour)

	Predictors	Step 1 B	Step 2 b	Step 3 b	Step 4 b	Step 5 b	Step 6 b	Step 7 b
1	Constants	3.181	2.022	1.801	1.633	1.493	1.372	1.310
	Age	.011	.009	.008	.009	.009	.009	.008
	Gender	.000	.035	.053	.052	.073	.076	.056
	Education	-.005	.009	.019	.012	.010	.010	.008
	Work experience	.218	.106	.122	.118	.010	.011	.032
2	1+ internal career opportunities		.496**	.308**	.255**	.205**	.199**	.001
3	2+ extensive training			.254**	.213**	.135	.118	.161*
4	3+ employment security				.132*	.106	.091	.081
5	4+ participation and communication					.208**	.167**	.160**
6	5+ sensitive selection						.115**	.123**
7	6+ incentive compensation							.251**
	F change	2.886	22.249	21.345	19.442	19.183	17.872	18.605
	Sig. F	.013*	.000**	.000**	.000**	.000**	.000**	.000**
	R ²	.039	.276	.300	.309	.332	.341	.372
	Adj.R ²	.026	.264	.286	.293	.315	.322	.352
	Δ R ²	.039	.237	.024	.009	.023	.008	.032

Note: (*p<0.05, **P<0.01, PV Predictor Variable, Dependent Variable: Organizational Citizenship Behaviour, N=357, b Standardized beta Score)

The demographic variables such as age, gender, education, and work experience explain only 3.9 (R^2 .039; $F(5, 351) = 2.886$, $p > .01$) per cent variance in the dependent variable. In the second model internal career opportunities was added and this increased the variance significantly by 27.6 (R^2 .276; $F(1, 350) = 22.249$, $p > .001$) per cent. The third model adds extensive training, which also significantly increased the R^2 by 2.4 per cent (R^2 .300; $F(1, 349) = 21.345$, $p > .001$). The fourth model adds employment security and significantly improves the R^2 by 0.9 per cent (R^2 .309; $F(1, 348) = 19.442$, $p > .05$). In the fifth model participation and communication was added and this increased the variance significantly by 2.3 (R^2 .332; $F(1, 347) = 19.183$, $p > .05$) per cent. The sixth model adds sensitive selection, which also significantly increased the R^2 by 0.8 per cent (R^2 .341; $F(1, 346) = 17.872$, $p > .01$). In the seventh model incentive compensation was added and this increased the variance significantly by 3.2 (R^2 .372; $F(1, 345) = 18.605$, $p > .01$) per cent.

The retained model significantly explained approximately 37 per cent of variance in OCB (R^2 37.2 per cent, adjusted R^2 35.2 per cent). The findings exhibit an interesting pattern that the strength of association of internal career opportunities with dependent variable decreases (from b value 496** to 199**) in presence of extensive training, employment security, participation and communication, and sensitive selection but remains significant. The association turns insignificant in the presence of incentive compensation. The same results again appeared in fifth model where the relationship of both factors (extensive training, and employment security) with dependent variable turns insignificant and only internal career opportunities and participation and communication demonstrate the significant relationship with dependent variable of the study. Interestingly, in the seventh model the relationship of internal career opportunities and employment security with dependent variable turns insignificant and all other factors (extensive training, participation and communication, sensitive selection, and incentive compensation) demonstrate the significant relationship with dependent variable of the study.

The regression results exemplify the fact that IT employees who benefit from high-performance HR practices are more likely to reciprocate through citizenship behaviours and vice versa. The findings indicate that employee perceptions of implementation of the high-performance HR practices in a specific organizational setting may prove to be instrumental in determining the degree to which an individual employee exhibits citizenship behaviours at the workplace. This is supported by the work of Zhang et al., 2008, who found a positive association between high-performance HR practices and OCB among employees working in the pharmaceutical industry in China.

4.5.2 The Role of Psychological Climate on OCB

To study the function of psychological climate on OCB, the predictor role of psychological climate factors (supportive management, role-clarity, self-expression, contribution, and recognition) were examined on OCB. A hierarchical multiple regression analysis was carried to see weather factors of psychological climate i.e. supportive management, role-clarity, self-expression, contribution, recognition, and challenge made a significant contribution to the variance in the OCB. The demographic variables i.e. age, gender, education, and work experience were treated as control variables. The predictor variables were entered as follows: step one control variables (age, gender, education, and work experience), step two: step one + supportive management, step three: step two + role-clarity, step four: step three + self-expression, step five: step four + contribution, step six: step five + recognition, step seven: step six + challenge. **Table 4.13** presented the results of hierarchical multiple regression analysis.

The demographic variables such as age, gender, education, and work experience explains only 3.7 ($R^2 .037$; $F (5, 351) 2.333$, $p >.05$) per cent variance in the dependent variable. In the second model supportive management was added and this increased the variance significantly by 7.8 per cent ($R^2 .115$; $F (6, 350) 6.498$, $p <.01$). The third model added role-clarity, which is also significant and increased R^2 by 7.9 per cent ($R^2 .194$; $F (7, 349) 10.294$, $p <.01$). The fourth model added self-expression which significantly improved the R^2 by 1.0 per cent ($R^2 .205$; $F (8, 348) 9.584$, $p <.01$). In the fifth model recognition was added and this increased the variance significantly by 3.3 ($R^2 .238$; $F (9, 347) 10.308$, $p >.01$) per cent. The sixth model adds contribution, which also significantly increased the R^2 by 2.6 per cent ($R^2 .264$; $F (10, 346) 10.613$, $p >.01$). In the seventh model challenge was

added and this increased the variance significantly by 2.3 (R^2 .287; $F(11, 345) 10.786, p >.01$) per cent.

The results explained approximately 28.7 per cent variance in OCB ($R^2 = 28.7$ per cent, adjusted R^2 26.0 per cent). The findings exhibit an interesting pattern that the strength of association of supportive management with dependent variable turns insignificant in presence of role-clarity and self-expression. The same results again appeared in fifth, sixth, and seventh model where the relationship of both factors (supportive management and self-expression) with dependent variable turns insignificant and only role-clarity, recognition, contribution, and challenge demonstrate the significant relationship with dependent variable of the study.

4.5.3 The Role of Work Engagement on OCB

To study the function of work engagement on OCB, the predictor role of work engagement factors (vigor, dedication, and absorption) were examined on OCB. A hierarchical multiple regression analysis was carried to see whether factors of work engagement i.e. vigor, dedication, and absorption made a significant contribution to the variance in the OCB. The demographic variables i.e. age, gender, education, and work experience were treated as control variables. The predictor variables were entered as follows: step one control variables (age, gender, education, and work experience), step two: step one + vigor, step three: step two + dedication, step four: step three + absorption. Table 4.14 presented the results of hierarchical multiple regression analysis.

The demographic variables such as age, gender, education, and work experience explains only 3.9 (R^2 .039; $F(5, 351) 2.024, p >.05$) per cent variance in the dependent variable. In the second model vigor was added and this increased the variance significantly by 12.1 per cent (R^2 .160; $F(6, 350) 8.141, p <.01$). The third model added dedication, which is also significant and increased R^2 by 5.4 per cent (R^2 .214; $F(7, 349) 10.126, p <.01$). The fourth model added absorption which significantly improved the R^2 by 2.9 per cent (R^2 .242; $F(8, 348) 10.550, p <.01$).

Table 4.13 Results of Hierarchical Regression Analysis (PV Psychological Climate, DV Organizational Citizenship Behaviour)

	Predictors	Step 1 B	Step 2 b	Step 3 b	Step 4 b	Step 5 b	Step 6 b	Step 7 b
1	Constants	3.322	2.540	2.259	2.076	1.761	1.764	1.685
	Age	.070	.015	.008	.003	.012	.025	.023
	Gender	.013	.014	.018	.004	.013	.021	.021
	Education	.110	.009	.019	.012	.010	.068	.077
	Work experience	-.083	-.034	-.102	-.083	-.090	-.104	-.108
2	1+ supportive management		.297**	.144*	.101	.110	.079	.091
3	2+ role-clarity			.326**	.287**	.288**	.187**	.146*
4	3+ self-expression				.125*	.036	.047	.030
5	4+ recognition					.216**	.178**	.172**
6	5+ contribution						.202**	.007**
7	6+ challenge							.281**
	F change	2.333	26.342	29.380	23.584	13.308	10.613	9.786
	Sig. F	.010*	.000**	.000**	.000**	.000**	.000**	.000**
	R ²	.037	.115	.194	.205	.238	.264	.287
	Adj.R ²	.021	.097	.175	.183	.215	.239	.260
	Δ R ²	.037	.078	.079	.010	.033	.026	.023

Note: (*p<0.05, **P<0.01, PV Predictor Variable, Dependent Variable: Organizational Citizenship Behaviour, N=357, b Standardized beta Score)

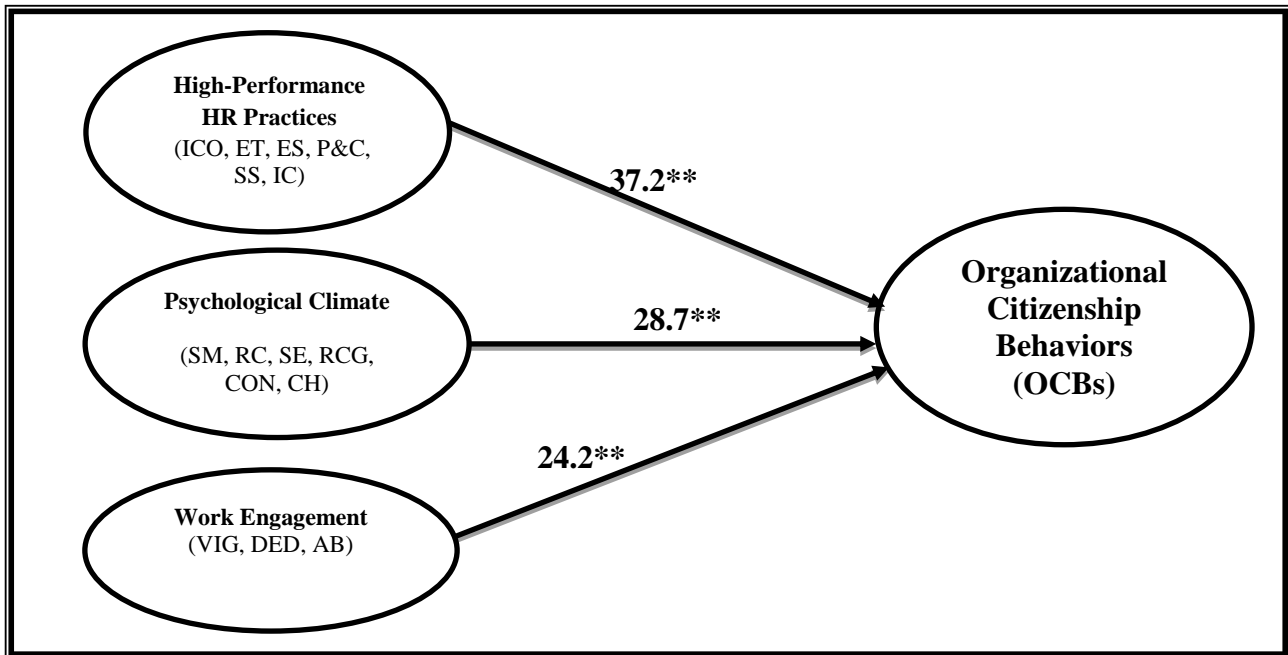
The results explained approximately 24.2 per cent variance in OCB ($R^2 = 24.2$ per cent, adjusted $R^2 = 21.9$ per cent). The findings exhibit an interesting pattern that the strength of association of vigor with dependent variable decreases (from b value 353** to 168**) in presence of dedication but remains significant. The same results are again appeared in fourth model where the relationship of both factors (vigor and dedication) with dependent variable turns insignificant and only absorption demonstrates the significant relationship with dependent variable of the study.

Table 4.14 Results of Hierarchical Regression Analysis (PV work engagement, DV Organizational Citizenship Behaviour)

	Predictors	Step 1 b	Step 2 b	Step 3 b	Step 4 b
1	Constants	3.213	2.645	2.176	1.999
	Age	.079	.056	.078	.045
	Gender	.014	.015	.048	.050
	Education	-.113	-.075	-.069	-.054
	Work experience	-.113	-.122	-.102	-.106
2	1+ vigor		.353**	.168*	.124
3	2+ dedication			.304**	.105
4	3+ absorption				.286**
	F change	2.024	43.138	20.336	11.178
	Sig. F	.012*	.000**	.000**	.000**
	R^2	.039	.160	.214	.242
	Adj. R^2	.020	.140	.193	.219
	ΔR^2	.039	.121	.054	.029

Note: (* $p < 0.05$, ** $P < 0.01$, PV Predictor Variable, Dependent Variable: Organizational Citizenship Behaviour, $N=357$, b Standardized beta Score)

Figure 4.5 H1, H2, H3 Results: High-Performance HR Practices and OCB, Psychological Climate and OCB, Work Engagement and OCB ** p < .01; —————> Hypotheses Accepted



Legend: ICO- Internal Career Opportunities; ET- Extensive Training; ES- Employment Security; P&C- Participation & Communication; SS- Sensitive Selection; IC- Incentive Compensation; SM-Supportive Management; RC-Role-Clarity; SE-Self-Expression; RCG-Recognition; CON-Contribution; CH-Challenge; VIG-Vigor; DED- Dedication; AB- Absorption

4.6 TESTING THE STRUCTURAL MODEL

4.6.1 Measurement Models

The study carried out a series of dimension-level confirmatory factor analysis to examine whether the four study variables capture distinct constructs. The four factor (high-performance HR practices, psychological climate, work engagement, and organizational citizenship behavior) model fitted the data well (χ^2 [df] 157.63[74]; CFI= 0.962; RMSEA= 0.056; SRMR= 0.024; GFI= .941). The study tested other two models (1) a three-factor model, psychological climate, work engagement and OCB were merged into a single factor, did not fit the data satisfactorily (χ^2 [df] 392.29[76]; RMSEA= 0.11; (2) another three-factor model where high-performance HR practices, psychological climate and work engagement were merged into a single factor, also did not fit the data satisfactorily (χ^2 [df] 333.58[76]; RMSEA= 0.09. The findings provided support for the discriminant validity of high-performance HR practices, psychological climate, work engagement, and organizational citizenship behaviors constructs.

4.6.2 Structural Models

High-performance HR practices, psychological climate, work engagement and OCB are represented as latent variables in the structural model. Specifically, high-performance HR practices have six indicators, i.e., internal career opportunities, extensive training, employment security, participation and communication, sensitive selection, and incentive compensation. Psychological climate has six indicators corresponding to the items that compose the scale, i.e., supportive management, role-clarity, self-expression, recognition, contribution, and challenge. Work engagement has three indicators, i.e., vigor, dedication, and absorption. Finally, OCB has five indicators, i.e., altruism, courtesy, civic-virtue, conscientiousness, and sportsmanship.

According to Baron and Kenny (1986) and Judd and Kenny (1981), when a mediating model involves latent constructs, SEM provides the basic data analysis strategy. In accordance with the four fundamental steps to establish the mediating effects proposed by the current research and to test the hypothesized mediating role of psychological climate in the relationship between high-performance HR practices and work engagement, the research model (M1) was fitted to the data, as depicted in **Figure 4.6**. The results presented in **Table 4.15** show that the research model fitted the data well and that all the fit indices met the criteria [$\chi^2=389.81$, $df= 166$; RMSEA= .06; TLI=.95; CFI= .95; AGFI=.90; IFI=.95].

The path coefficients from high-performance HR practices to psychological climate ($b = .67$; $t =10.616$; $p < .01$) (Hypothesis 4.1) and from high-performance HR practices to work engagement ($b = .75$; $t =11.662$; $p < .01$) (Hypothesis 4.3) were statistically significant. Psychological climate is purported to be conducive to employees' work engagement. Hypothesis 4.2 states that the employees' positive work climate perceptions have a positive impact upon their level of work engagement. The test indicated that the two factors have a positive, statistically significant relationship ($b = .80$; $t =10.222$; $p < .01$). So we observed fulfilment of the first three steps: (i) Independent variable i.e. high-performance HR practices must affect the mediator variable i.e. psychological climate (ii) high-performance HR practices must affect the dependent variable i.e. work engagement (iii) psychological climate must affect the work engagement as described by Baron and Kenny (1986) and Judd and Kenny (1981). In the fourth step described by the authors, one or more paths (High-performance HR practices to work engagement) in the hypothesized model were added to analyze the mediating effects of psychological climate (Hypothesis 4.4) (see **Figure 4.6**).

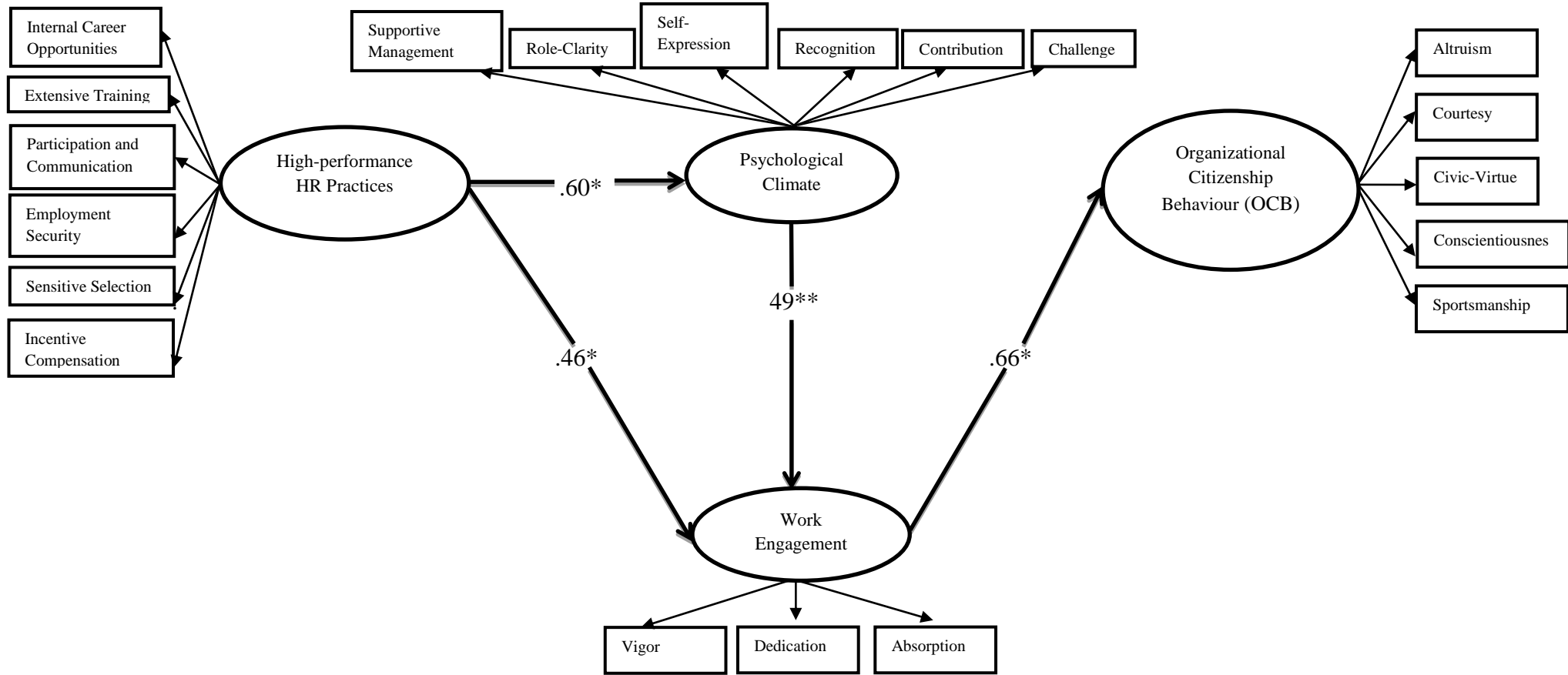
Following this, the direct relationship between high-performance HR practices and work engagement was also observed as statistically significant ($b = .46$). These results therefore showed that

psychological climate partially mediated the relationship between high-performance HR practices and work engagement.

To test whether work engagement mediates the impact of high-performance HR practices and psychological climate on OCB (Hypothesis 4.5), additional analysis were carried out. First, the direct paths from high-performance HR practices and psychological climate to OCB were added to the research model (M1). This new model (M2) fitted the data [$\chi^2=376.64$, $df= 164$; RMSEA= .06; TLI=.95; CFI= .95; AGFI=.90; IFI=.95] and none of the new parameters were found to be statistically significant: high-performance HR practices on OCB with $b = .14$; $t = 1.793$; $p = .424$, psychological climate on OCB with $b = .29$; $t = 1.867$; $p = .061$. That is even though the implementation of high-performance HR practices had a positive influence on psychological climate; psychological climate may not have a statically significant direct impact on citizenship performance. Therefore, at least partial mediation exists.

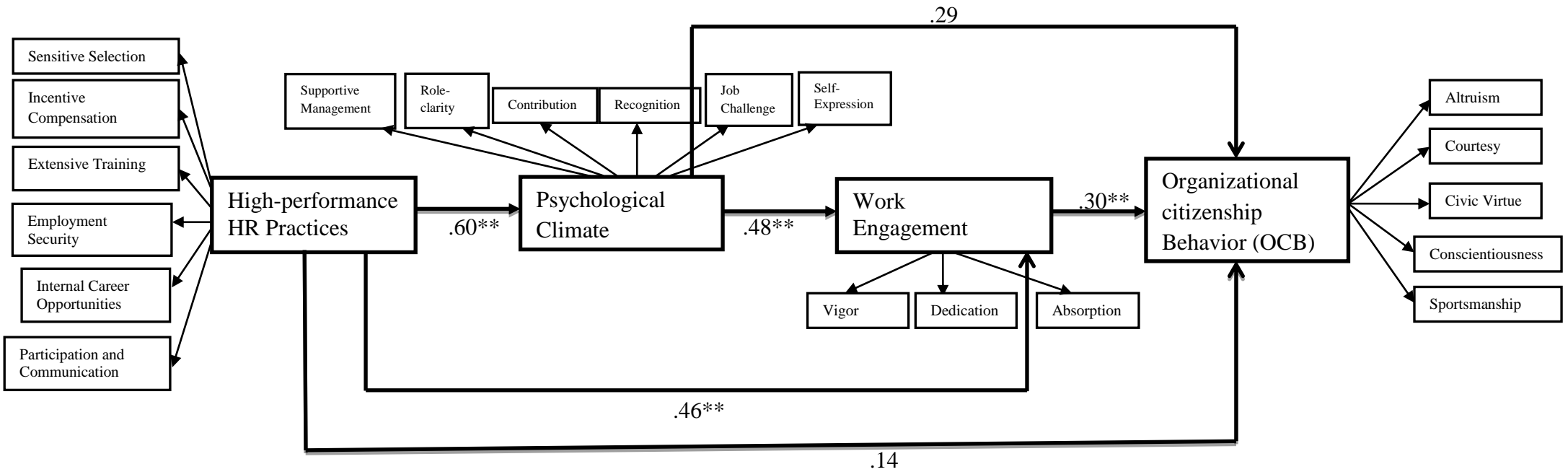
Finally, the value of the parameters estimating the impact of work engagement on OCB of the research model (M1) to the value presented by this parameter (unstandardized coefficient) of the M1 was fixed and a new alternative model was fitted to the data (M3). Although the model fits the data with all the fit indices meeting the criteria [$\chi^2=376.64$, $df= 164$; RMSEA= .06; TLI=.95; CFI= .95; AGFI=.90; IFI=.95], the difference between the chi-square statistics associated with M3 and M2 was not statistically significant (see **Table 4.15**). Thus, the influence of high-performance HR practices and psychological climate on OCB was fully mediated by work engagement.

Figure 4.6 The Research Model (M1)



Note: $^{**}p < 0.01$, $^*p < 0.05$

Figure 4.7 The Alternative Model (M2)



Note: $**p < 0.01$

Table 4.15 Model Fit

Model	χ^2	df	RMSEA	GFI	AGFI	IFI	CFI	$\Delta\chi^2$	Δ df
M1	379.805	166	0.06	0.93	.90	.96	.96	--	--
M2	376.645	164	0.06	0.94	.90	.96	.96	M2-M1 = 3.26 n.s.	2
M3	379.805	166	0.06	0.93	.90	.96	.96	M3-M2 = 3.26 n.s.	2

M1 = research model, M2 direct paths from high-performance HR practices and psychological climate to OCB, and M3 = new alternative model; the value of the parameter estimating the impact of work engagement on OCB of the research model (M1) (unstandardized coefficient) was fixed.

d.f., degrees of freedom; RMSEA, Root Mean Square of Approximation; GFI, Goodness-of-Fit Index; AGFI, Adjusted Goodness-of-Fit Index; IFI, Incremental Fit index; CFI, Comparative Fit Index.

4.7 DISCUSSION ON FINDINGS

This section discusses the causes for the relationship found among variables of the study. Importantly, this research totally represents a theory driven examination of how different factors of high-performance HR practices, psychological climate, and work engagement are associated with organizational citizenship behaviours. In addition, it also discusses how high-performance HR practices combining with employees' perceptions of psychological climate and work engagement predict OCBs. Specifically, the following results are found and described summarily as follows:

- A positive relationship exists between high-performance HR practices and OCBs, perceived psychological climate and OCBs, and work engagement and OCBs among IT personnel.
- Psychological climate partially mediates the relationship between high-performance HR practices and work engagement in organization among IT personnel.
- High-performance HR practices indirectly influence the OCBs but directly affect psychological climate and work engagement in organization among IT personnel.
- Psychological climate indirectly influence the OCBs but directly affect work engagement in organization among IT personnel.
- Work engagement fully mediates the impact of high-performance HR practices and psychological climate on OCBs among IT personnel.
- Work engagement has a direct impact on IT personnel's OCBs, whereas high-performance HR practices and psychological climate has no direct impact on IT personnel's OCBs.

4.8 HIGH-PERFORMANCE HR PRACTICES AND OCBs

The regression results revealed that high performance HR practices will have a significant positive effect on OCBs. It also exemplifies the fact that IT employees who benefit from high-performance HR practices are more likely to reciprocate through citizenship behaviours and vice versa. It has been previously observed that HR practices can “fostersalient productivity-related behaviors” such as performance, citizenship, and attachment (Ostroff & Bowen, 2000).A similar result has been found in a study by Zhang et al.(2008), in which they found that high-performance HR practices positively influenced

OCB among employees working in the pharmaceutical industry in China. These findings indicate that employee perceptions of the high-performance HR practices in a specific organizational setting may prove to be instrumental in determining the degree to which an individual employee exhibits citizenship behaviours at the workplace.

In the context of present study, analysis of the effect of dimensions of high-performance HR practices i.e. internal career opportunities, extensive training, employment security, participation and communication, sensitive selection, and incentive compensation show a significant positive effect on employees' willingness to do more than required, to go the extra mile. The results point to the changing nature of HR practices particularly in technology organizations in India which focus on employee development of positive perceptions of the organizational support for their learning, growth, and development, in order to leverage employees' increased manifestations in organizational citizenship behaviours. The findings of the present study suggest that, IT employees who believe that their organization put employee-focused HR practices in place are more likely to exhibit organizationally beneficial behaviours. For instance, nature of work in IT organizations poses high demand for change and learning. Employees are required to possess diverse skills and knowledge to perform their job duties efficiently. Considering this, employees may experience a high level of job stress in the absence of adequate and timely training programs. They may also respond in an unkind way and exhibit counter-productive work behaviours. On the other hand, when employees perceive that their organization pays close attention to the individual training needs and design diverse training programs to enable its employees perform better in current jobs, it is likely that employees respond not only by performing the in-role behaviours but they may also reciprocate in kind and pay back while performing extra-role behaviours. This is consistent with the observations in existing literature i.e. where organizations invest in individual training and development programs; employees tend to display desirable work-related behaviours (Gould-Williams, 2007; Wayne et al., 1997).

The available diachronic literature also suggests that when HR systems are perceived to emphasize training, participation and career development practices, they are likely to bring about desirable behavioral responses (Baluch et al., 2013; Kuvaas 2008). Clearly, employees in IT organizations are knowledge workers and hence, they are the competitive strength of the organization. Organizational focus on HR practices like substantive participation and bottom-up communication (Kataria, Kataria, & Garg, 2013)

show that employees are valued and treated with respect at workplace. And, employees tend to feel associated with the organization and there is high possibility that they will behave in citizenship ways and prevent the organizational image from being tarnished. Moreover, knowledge workers seek job opportunities which provide them with a sense of autonomy, decisional latitude, and achievement of personal goals. By participating in making decisions on how the work is done (i.e. self-management teams, made up of empowered individuals), employees obtain a sense of achievement, self-expression, and satisfaction (Park, 2012). Intrinsic rewards including psychological benefits (e.g. sense of achievement and satisfaction) represent organizational support and care for employee well-being at work, which motivates employees to reciprocate the company's generosity by exhibiting citizenship behaviours and supporting organizational goals. With a similar view, Yang, (2012) recognized that empowering employees to participate in day to day decisions about job-related activities enable them to serve extra roles, bear additional responsibilities, and exhibit increased autonomy at work.

The discussion above divulges that fact that IT employees consider organization's focus on its human capital performance and development while performing beyond expectations. In a similar vein, Kraimer et al., (2011) reported that employees' perceptions of career opportunities within the organization positively relates to their performance at work. More importantly, current findings indicate that employee' perceptions of internal career opportunities may act as positive motivator for them to perform up to high standards at work. Accordingly, IT professionals tend to interpret organizational actions and commitment for their future growth as indicative of care towards them and respond accordingly by putting extra efforts to make a significant contribution to the organizational success.

As a matter of fact, technology organizations are aware of the fact that knowledge workers have several job options. They need to be managed effectively. By adopting a promising approach towards employees' career aspirations, fairness perceptions of compensation system, and employment security, organizations facilitate an effective-internal structure that holds some promise of advance to retain or attract top-quality technical professionals. And, this type of HR system may also prove conducive to the performance of OCBs. Supporting the view, the results further depict that individual performance-based compensation system leads to higher employee efforts and better performance in IT organizations. Likewise, Nasudin et al., (2014) also revealed the direct

effects of compensation on service-oriented citizenship behaviours among hotel employees. This suggests that employees are highly motivated to put extra efforts in their work roles, when they perceive that their organization adequately rewards star performers. It is not surprising, as it is well established in previous research that rewarding exemplary individual performance leads to extra efforts since it provides employees an economic incentive (Stavrou, Brewster, & Charalambous, 2010). It can also be suggested that when individuals are rewarded for their successful efforts, it fosters self-esteem, autonomy and recognition at work, which furthers their tendency to extend extra efforts at work. Considering the findings of previous research, employees' positive perceptions of compensation promote satisfaction with pay (Bhal & Gulati, 2007) and reduce turnover intentions (Luna-Arocas&Camps, 2008). It is reasonable to believe that employees' perceptions of support from the human resource management system in terms of getting fair reward and compensations are important (Gulati & Bhal, 2004) to enhance the levels of organizational justice, that is further associated with increased employee performance (Burney, Henley, & Widener, 2009) including extra-role behaviours.

The study in this context further indicates that high-performance HR practices may enhance the conditions where IT professionals become highly involved in the organization and work hard to accomplish its goals by assuming more tasks, roles and responsibilities. When organizations design, develop, and institute sophisticated selection procedures that pay close attention to the behavioral traits of prospective employees and assess their work values, knowledge sharing attitudes, and desire to stimulate team performance, there are increased chances that IT professionals achieve higher quality and greater output while demonstrating citizenship behaviours. Corroborating findings in previous research (Baptiste, 2008), the current study findings show that sensitive selection practices helps an organization to achieve superior performance through its human resources.

In the context of social exchange theory, high-performance HR practices can be seen as initiating positive social-exchange process with organizational members while emphasizing their individual needs and well-being at work. The positive influence of employment security on employees' OCBs suggest that employment security signals to employees organization's attentiveness and care for their psychological needs that in reciprocation facilitates heightened propensity of employees to exhibit citizenship behaviors. As observed, though pay and employee benefits are two of the most important factors in a job, but non-monetary incentives such as employment security may also act as

a psychological attraction that serve to guide employees' workplace performances (Hsu et al., 2003). Corresponding to this discussion, the findings from previous study by Kang et al. (2012) suggest that cognitive experiences, like job insecurity, reduces the propensity to exhibit citizenship behaviors. Whereas employment security demonstrate organization's loyalty to its employees, and employees experience a sense of financial security and long term employment relationship, which enhance employees' willingness to demonstrate citizenship behaviours. Consistent with the findings of the present study, Feather and Rauter (2004) reported a positive relationship between job security and OCBs among a sample of teachers. Similarly, Mahmoud and Reisel (2014) concluded that employees when perceive job security they tend to be more satisfied and exhibit more involvement in getting their tasks and duties well-done.

In sum, high-performance HR practices including internal career opportunities, extensive training, employment security, participation and communication, sensitive selection, and incentive compensation may act as long-term innovative HR strategy that is instrumental in encouraging and sustaining employees' citizenship behaviors at work so as to increase the potential for organizational effectiveness. Particularly, high-performance HR practices may satisfy employees' psychological needs at work and thus foster a high-quality employment relationship that may in turn encourage employees to assume the role of good organizational agents.

4.9 PSYCHOLOGICAL CLIMATE AND OCBs

The results also revealed a positive relationship between psychological climate and organizational citizenship behaviours. Existing body of research (Brown & Leigh, 1996; Shuck et al., 2011; Wei et al., 2010) has also observed the significance of employees' perceptions of the working environment in persuading discretionary efforts at workplace. This study attempts to correlate psychological climate (supportive management, role clarity, self-expression, recognition, contribution, and job-challenge) with OCBs in IT industry.

The findings from the present study suggest that contextual attributes are significant to induce OCBs in organizations among IT professionals. It is also a fact that advances in technology and frequent alterations in the business climate of IT organizations makes the working environment highly ambiguous and challenging for employees to perform up to their full potential (Chiang et al., 2013). Workplace factors such as role-

clarity, managerial support, recognition, and meaningfulness hold special significance to such work climates. Employees experiencing favorable working conditions tend to perceive their work as psychologically fulfilling leading to enhanced personal well-being. And, they feel enabled to make meaningful contribution for the success of boundary spanning projects and display OCBs that facilitate team-based work, group performances, ongoing coordinations and collaborations, and interdependences in work groups. On the other hand, absence of positive workplace factors and supportive gestures on the part of management lead to higher job stress, decreased motivation, and work-family conflict (Karimi & Nouri, 2009; Nasurdin, Ramayah, & Beng, 2009; Yeh & Chao, 2011), which inhibit employees to display OCBs.

Management concern for employees' requirements and opinions, developmental feed-back, autonomy, flexibility, recognition, meaningfulness, and role-clarity may create a facilitative climate for employees to experience congenial working conditions. As a consequence to which, employees feel enthusiastic to perform well and display increased OCBs. Thereby, maintaining a balanced social-exchange with the organization. In fact, in environment of openness, trust, collaboration, and harmony with supervisors, employees tend to feel supported at workplace which may create a sense of obligation on the part of the subordinates to reciprocate in terms of behaviors valued by the supervisor such as exhibiting desirable coordination in work activities and putting extra efforts in reaching organizational goals. On the contrary, in the absence of managerial support, employees are less likely to bring up new ideas, ask questions about their specific job role, experience role ambiguities, and lack of trust with their manager, which inhibits employees' manifestations in OCBs. Similarly, Gregory et al., (2013) suggested that employees may withhold psychological support and comfort to others, along with other citizenship behaviors, due to unsupportiveness of their managers.

The discussion above suggests that positive psychological conditions at work motivate IT professionals to trust their working environment in ways that encourage them to engage in actions that lie outside the primary job responsibilities. For instance, freedom of self-expression in work roles significantly provides opportunities to employees to voice their opinions freely rather than functioning in a mute condition at work. Consequently, they tend to experience emotional safety and positive reinforcement in the organization and hence, are more likely to provide the expected performance. Implementation of such practices also release stress of an individual and provide employees with an opportunity to

express unique features of their personality, also enabling them to exhibit behaviours that are recognized at workplace such as willingness to cooperate, helping, and giving suggestions to improve work methods. By establishing the importance of freedom of self-expression as a determinant of OCB in IT organizations, the present study suggests that the more autonomy employees have in their jobs, the more opportunity they have to show extra-role behaviours (Runhaar et al., 2013).

Situational cues shape the salience and meaning of organizational events and processes for employees. Such as, the results from the present study suggest that well-specified job responsibilities represent an opportunity for employees to contribute meaningfully to their organizations. Whereas, role ambiguity (a reverse construct of role-clarity) - the degree to which a job lacks well-specified responsibilities-is likely to decrease work motivation (Hassan & Rohrbaugh, 2011) and inhibit employees to perform OCBs. In addition, lack of clarification in work roles may induce role stress which has been found to affect employees' affective commitment with the organization (Hassan & Rohrbaugh, 2011). Whereas, clear expressions and agreements concerning work norms and role expectations are expected to increase positive emotions, provide employees with a feeling of occupational-efficacy and reinforce enthusiasm in employees to perform better in their jobs. Similar to these observations is the finding in previous literature that nurses' perceptions of job requirements positively influenced their peer-rated OCB (Clark et al., 2013). Notably, high role-clarity could facilitate citizenship performance by clarifying relevant behaviours that are valued by the organization by developing a realistic sense of when OCBs can be performed without distracting from in-role duties (Whitaker et al., 2007). Likewise, the current study findings reflect that clear role definitions are pertinent to induce OCBs because when employees are unaware of what is expected of them, they may hesitate to act, show lack of self-determination, and feel unable to make a difference in achieving the organization's goals (Spreitzer, 1996).

Furthermore, employee recognition for successful efforts, a sense of meaningful contribution to organizational goals while perceiving an optimal level of job challenge leads to extra efforts at workplace. Surprisingly, Dixon et al., (2010) concluded job challenge as the most important work characteristic related to affective organizational commitment. It was further suggested that challenging job experiences empower individuals to reach their personal goals, and employees also perceive that the organization is committed to helping them meet their individual needs (Arthur, 1994). Consequently,

they perceive a high-quality exchange relationship with the organization and become more favorably disposed toward the organization while performing citizenship behaviours that are associated with organizational effectiveness. Adding further to the existing body of research, the present study verifies empirically that employee' perceptions of job challenge significantly and positively relates to OCB. This reflects that an optimal level of job challenge is perceived by employees as non-monetary incentives and rewards in the form of potential for growth, mastery, or gain at work which may motivate them to show the expected performance. Further, employees may perceive challenging task assignments as pivotal for their career advancement and development in the organization which augments their tendency to display behaviours that are recognized at workplace. On the other hand, when employees perceive their jobs lack challenge, opportunity for growth, learning, and support, they fail to develop an attachment to the organization and leave prematurely (Dixon et al., 2005). Whereas job challenge facilitates goal attainment among employees leading to enhanced self-efficacy and job satisfaction and further serve to motivate extra-role behavior (Webster, Beehr, & Christiansen, 2010).

As a matter of fact, simultaneous provision of employee recognition, contribution, and job challenge represents the allocation of personal non-monetary rewards which has the potential to reinforce positive behaviors. For instance, recognition for a job well done provides a clear and visible statement to all employees of the organizational values and the commitment to employee involvement (London & Higgot, 1997). Perhaps, it is one of the top motivational strategies which enhance employee performance. Noticeably, formal organizational recognition for quality work is one way for the organization to send a message to its employees concerning their perceived value, based upon which employees formulate positive perceptions about organizational support. Based on social exchange interpretation, such positive perceptions may act as an intrinsic motivator for IT employees to strive for the success of the organization and perform citizenship behaviours. Likewise, employees' perceptions of meaningful work and outcomes that their work is contributing to the organizational goals infuse a sense of fulfilment in them. And consequently, they feel more closely associated with the work roles. It also shapes the quality of their working life and interpretations of work through a sense-making process while employees experiencing enhanced motivation and well-being at workplace. In this process, employees' sense of self-worth is enhanced and they feel happy, content, and fulfilled to produce cooperative behaviours at work. Corresponding to this observation, work

meaningfulness has been previously shown to have important implications for organizational consequences including increased citizenship behaviours (Tyler & Blader, 2003).

In sum, it is observed that work context operates in such a way so as to define role-requirements and responsibilities of employees and to provide opportunities for the display of human excellence at work (Farh, Zhoing, & Organ, 2004).

4.10 WORK ENGAGEMENT AND OCBs

Table 4.14 depicts that work engagement is positively related to OCBs. These findings are the indications of engaged IT employees' enduring state of fulfillment which they bring at work while feeling intrinsically motivated to exhibit positive feelings such as sharing, assisting, cooperating, and supporting. This could be due to the fact that engaged employees experience more trusting and high-quality relationships with their employer which motivates them to feel obliged and pay back by exhibiting more positive intentions toward in forms of OCBs. Similarly, Erickson, (2005) believes that engaged individuals have high propensity to behave in organizational citizenship ways. As engaged employees care about the future of company and they are willing to invest the discretionary effort to see that the organization succeeds (Sundaray, 2011). Another significant reason could be that engaged employees have a sense of energetic and affective connection with their work activities, and they see themselves as able to deal well with the demands of their jobs (Schaufeli et al., 2006), therefore they are in a better position to perform extra-role behaviours.

More importantly, engaged employees often experience positive emotions (Bakker et al., 2011; Bindl & Parker, 2010). Positive emotions for instance compassion, joy, and absence of fear and anger, etc. lead to the positive activities in organizations like helping behavior and that indeed, create an upward spiral of positive feelings (Cameron et al., 2003). That is, employees, when engaged, are more likely to create a social context that is conducive to teamwork in presence of altruism, voice, and courtesy (Christian et al., 2011). This notion confirms the view of Shantz et al. (2010) that work engagement benefits the organization by stimulating OCBs.

Work engagement was found in previous studies to be an antecedent for OCBs (e.g. Rurkkhum & Barlett, 2012; Shantz et al., 2013; Sulea et al., 2012). It has been suggested that not only do engaged employees perform better, they also show beneficial

behaviours towards the organization (Runhaar et al., 2013) such as OCBs. In the context of present study, it is suggested that engaged IT professionals' relatively enduring state of being active reflect interpersonal facilitation. And their constant willingness to find meaning in work keeps them emotionally engaged (i.e. job dedication). Both of them (interpersonal facilitation and job dedication) have long been recognized as inherent concepts of OCB (Van Scotter & Motowidlo, 1996). Furthermore, positive psychological state of mind at work i.e. engagement has been suggested as conducive to the broadened employee cognition at work which is associated with higher levels of creativity, broader scope of attention and openness to information (Fredrickson 2001; Shantz et al., 2013). All these factors may increase the tendency of taking initiative and exhibiting proactive behaviours at workplace.

4.11 HIGH-PERFORMANCE HR PRACTICES, PSYCHOLOGICAL CLIMATE, WORK ENGAGEMENT, AND OCBs

In an attempt to discover the mechanism underlying the relationship between high-performance HR practices, psychological climate and work engagement, based on the appropriate theoretical framework and literature review, psychological climate was tested for its mediation effects (M1). The study results provided partial support for the hypothesis where psychological climate was proposed as the mediator of the relationship between high-performance HR practices and work engagement. In other words, high-performance HR practices were found to influence employees' psychological climate perceptions and employees' perceptions of psychological climate were found to affect their work engagement in IT organizations. Further, psychological climate was found to account for the relationship between high-performance HR practices and work engagement in part. This indicates the direct as well as indirect influence of high-performance HR practices on employees' work engagement.

The results demonstrate the critical role of high-performance HR practices in generating employees' favorable perceptions of their work environment attributes. Corroborating with the fact that HR systems serve as a monitoring system for employees to make sense of and to define the psychological meaning of their work context (Bowen & Ostroff, 2004; Ferris et al., 1998; Kopelman et al., 1990; Pereira & Gomes, 2012; Wei et al., 2010), this study verifies the positive influence of high-performance HR practices on employees' perceptions of psychological climate in IT organizations. This reflects that

high-performance HR practices in IT organizations have the strategic potential to enhance the quality of IT professionals' workplace experiences. High-performance HR practices such as empowerment, effective communication, fair rewards and compensation, and opportunities for internal growth, learning, and development may facilitate congenial work environment for employees while developing a sense of enhanced personal well-being at work. And, this augments employees' positive perceptions of their immediate working conditions. The results also indicate that IT organizations place greater importance not only on developing skills, motivation, and capacity of their human capital to enhance job performance but they also try to accommodate employees' psychological needs of meaningfulness, safety, and availability at the workplace. So that employees' work experience is holistic and psychologically fulfilling leading to human flourishing at work. It might be possible that when IT professionals perceive HR practices in the organization as supportive and conducive to their own personal well-being, they attain a sense of being valued and treated fairly at the workplace.

Contrary to the traditional view of human resources in which employees were used objectively and rationally as any other capital resource, the current study findings indicate that performance-oriented and employee-focused view of human resources in IT organizations considers employees' psychological needs and well-being at work while linking organizational strategy and employee skills to create high-performing organizations. Significant to this is the observation in previous literature that modern day HR practices attempt to provide a congenial and favourable climate where employees can identify with the organization and feel more satisfied on the job (Biswas & Varma, 2007). It was further suggested that HR practices in India are also increasingly geared towards improving the way individual employees perceive their everyday environment. The premise behind the positive association of employees' work experiences is that they can be somewhat controlled by the organization through human resource management practices that are purported to enhance employees' workplace performance. Indeed, HRM practices designed to improve organizational performance influence one or more facets of working environment (Kopelman et al., 1990). For instance, changes in pay and promotion policies might be expected to alter employee perceptions of rewards orientation and possibly of just and fairness at work; similarly, the introduction of training programs to improve employee performance at work, is likely to have a positive impression on employee perceptions of task support (Gelade & Ivery, 2003). Furthermore, innovative human resource

management practices and procedures that facilitate better intra professional relationships through effective communication and participation have been found to impact upon work climate in health care organizations (Agarwal & Sharma, 2011). The findings of the current study suggests that high-performance HR practices relate positively to IT professionals' perceptions of psychological climate is consistent with the previous research in this area (e.g., Foley et al., 2012; Rogg et al., 2001) which suggests that an organization's approach to its HR management is instrumental in eliciting positive climate perceptions.

Psychological climate perceptions are important because they enable an employee to interpret events, predict possible outcomes, and gauge the appropriateness of his/her subsequent actions (Jones & James, 1979). As we predicted in Hypothesis 5, the powerful motivational influence of positive psychological climate on IT employees' state of mind at work was confirmed. The results indicate that employees' positive perceptions of psychological climate significantly predict work engagement in IT organizations. This implies that IT employees who perceive that their organization takes care of well-being and shows consideration for their rights and requirements are likely to bring a healthy and positive state of mind at work. In contrast, when IT employees' psychological needs are not well understood by the management and they perceive less contextual support and experience stressful interactions with others, they are likely to negatively reciprocate poor treatment, and may feel less engaged in their work roles and unfocused about work activities. This is further affirmed as disengagement in work roles is often related to the perception of poor workplace conditions such as less than meaningful work, feelings of non-support from managers, and poor co-workers relations (Fairle, 2011; Shuck et al., 2011; Shuck & Herd, 2012).

The results from the present study agree with those of Parker et al. (2003) and Martin et al. (2005), who suggested that climate perceptions have the potential significance to employees' motivational and affective reactions at work (in our study, work engagement). The study clearly demonstrates that psychologically safe and meaningful working conditions are important source of IT employees' work engagement. Because, when employees perceive that their organization acutely provides a supportive, involving, and stimulating work climate, this may trigger employees to return the favor by investing time, energy, and by being psychologically involved in the work of their organization i.e. by being engaged at work. As observed, psychological climate may enhance employee

engagement through experimentation with and experiences of positive work conditions (Shuck & Wollard, 2010).

Recently, Dollard and Bakker (2010) have observed the significance of psychological safety climate in engaging workforce. They argue that a lack of psychologically safe working climate could lead to poorly designed jobs and chronic job demands which may hamper employees' work engagement. For instance, if worker concerns are not listened to, or if the importance of psychological well-being is not recognized, the fear of expression may increase along with emotional lags leading to less engagement in work roles. On the other hand, in work environments where employees perceive a freedom of self-expression, trusting interpersonal relationships, appropriate level of demands and challenges in jobs, and management commitment and care towards employee wellness, it is realistic to assume that employees will display higher levels of engagement with their work.

Similarly, other facets of working environment that promote the state of engagement and related employees experiences with their work include managerial support, autonomy with regard to task completion, recognition for role performances, and meaningful work. These immediate environmental attributes facilitate encouraging and supportive work environment that allows employees to feel psychologically empowered. Such working conditions can play a pivotal role in breeding work engagement and act as a prominent organizational resource in driving employees' greater attachment with their work roles. For instance, May et al., (2004) also suggested that employees are likely to be more engaged in their work when they feel that their supervisors are supportive and concerned about their well-being. Notably, supervisory support is recognized as a key resource that boosts motivation, alleviate stress and strain imposed by high job-demands (Menguc et al., 2012). It is further observed that lack of supervisory support create questions of being valued and recognized and results into detachment, frustration, and helplessness. However, it is interesting to note that employees choose to engage themselves to varying degrees and in response to the resources they receive from the organization (Saks, 2006) i.e. psychological climate. It was further recognized when the organization fails to provide the job resources and does not understand employees' welfare and interests; they are more likely to withdraw and disengaged themselves from their roles.

Results of the SEM analysis indicate that high-performance HR practices have impact on work engagement through employee perceptions and interpretations of the

working climate. Similarly, Evans et al., (2007) observed psychological climate as a powerful mechanism between organizational subsystem and employee outcomes. In the present study, high-performance HR practices are the representation of HR subsystem, which may enhance the conditions for higher work engagement through employees' positive perceptions of their work climate. Interestingly, individual climate perceptions have been previously posited as an interface between HR practices and organizational performance/effectiveness relationship (Ferris et al., 1999; Gelade & Ivory, 2003). More importantly, work engagement has recently been recognized as an important determinant of organizational effectiveness (Kataria, Rastogi, & Garg, 2013; Welch, 2011), which is based upon the employees' positive perceptions of their work climate (Shuck et al., 2011; Shuck & Herd, 2012). Considering these observations, it is logical to suggest that high-performance HR practices may influence work engagement through employees' positive evaluations of their working environments.

Furthermore, previous research (Bowen & Ostroff, 2004; Mossholder, Richardson, & Settoon, 2011; Rogg et al., 2001) suggests that climate operates as an interface between organizational attributes such as HR system, policies, and practices and work-related outcomes (such as job attitudes, satisfaction, empowerment, employee behaviors, task performance, safety, and ethics, which in turn affect the broader organizational outcomes. The present research suggests that employee perceptions of congenial working conditions in terms of psychologically safe and meaningful environment (characterized as contextual support, recognition and reward for meaningful contributions, and autonomy and feedback with regard to work etc.) act as an explanatory mechanism between high-performance HR practices and work engagement. For instance, organizational resources are provided to employees within the provision of human resource management policies and practices that create favorable working conditions for employees and provide opportunity to unleash their creativity. As a consequence, employees feel motivated to make an effort and contribute their personal resources in the pursuit of organizational effectiveness. That is, fulfilment of psychological contract, just and fair work procedures, and internal career growth, performance-based compensation policies, opportunities for learning and development may enhance the conditions for employees to perceive support, autonomy, psychological empowerment, and achievement at work. In a resourceful working environment, employees tend to feel protected and psychologically active that may automatically drive their willingness to focus upon and get psychologically involved in

their work activities. On the other hand, work environments where employees experience stress, burnout, injustice, lack of communication, role ambiguities, psychological disconnect with their work roles, lack of trust and reduced commitment from management, there are higher possibilities that they tend to withdraw emotionally, show lack energy for the work, and become disinterested and unconcerned about the people and tasks they encounter at work i.e. disengagement (Wollard, 2011). The findings of the current study can be supported with the findings of Kaya, Koc & Topcu (2010), who found that organizational climate (support for innovation, managerial competence and consistency, workload pressure, organizational boundaries, cohesion, organizational ethics) in Turkish banks improved as a result of HRM practices (behavior and attitudes, team working, extensive training, written policy, training in multiple functions, incentives, performance appraisal, feedback on performance) and this resulted into increased job satisfaction of employees.

Alternatively, the study suggests that high-performance HR practices directly influence employees' work engagement. This is not surprising, as high-performance HR practices are also known to have direct effects on employees' work engagement as well (Alfes et al., 2012).

Since, the concept of engagement has spawned a great deal of recent interest and central focus of contemporary organizations, human resource managers, researchers, and practitioners have found that the levels of engagement can be enhanced by developing talent (Fairlie, 2011). High-performance HR practices which focus upon human capital performance by developing talents, skills, ability, and motivation may promote the conditions conducive for higher levels of work engagement. Therefore, the provision of extensive training, opportunities for employee learning, growth, and development, performance based rewards and compensation are central to the concept of work engagement as that HR managers could ensure opportunities for increased employee attachment with their work roles. In addition, HR managers can play a pivotal role in designing effective recruitment and selection strategies to hire employees predisposed to high work engagement. Furthermore, when human resource managers assist employees in determining their training needs, set the stage for open communication, and revise their career development programs, employees get ensured for the greater achievement of their long-term goals with the current organization and consequently they may feel

psychologically satisfied and take effective engagement initiatives by investing greater positive energies in the workplace activities.

It makes sense that high-performance HR practices may prove conducive to work engagement as effective engagement initiatives require a certain degree of ‘advocacy’ for employees, efficacious focus on their well-being, and a strong commitment on the part of HR. This way, employees’ experience of human resource management practices in an organization has the potential to influence how they feel about work (Edgar & Geare, 2013) and bring positive state of mind in work-roles. The findings of the present study are in line with previous research that high levels of engagement are likely to occur when employees believe that they are valued, treated fairly, and perceive that the organization shows a willingness to invest in their development (Rurkkhum & Barlett, 2012). The current study provides some understanding of the manner in which high-performance human resource practices influence work engagement.

The fact has been well understood by human resource management researchers and practitioners that in this knowledge intensive business world particularly in IT organizations, employees have higher expectations about participating in decision making, pursuing dynamic involvement in organizational activities, and actively seeking work contexts where they believe they are treated with respect and fairness (Burke & Ng, 2006; Shuck & Herd, 2012). An organization through effective people management practices such as participation and communication, incentive compensation, sophisticated training and development system, provision of employment security, and internal career opportunities may send powerful signals to its employees that the organization supports them and has their well-being at heart.

A burgeoning of research suggests that perceived utility of human resource practices exert a strong influence on employee attitudes (such as job satisfaction and affective commitment) and workplace behaviours (such as lower turnover and citizenship behaviours) (Alfes et al., 2012). There is a reason to expect that high-performance HR practices may also enhance employees’ willingness to bring energetic, fulfilling, and affective state of mind at work. Because such practices indicate the nature of employment relationship that the organization wants to develop with its employees and state the expectations for how work is to be focused upon. When employees sense the quality of organizational actions (e.g., rewards and compensation, extensive training, empowerment) directed towards them, it is likely that benefits derived by such actions in terms of

learning, growth, and development encourage reciprocal interdependencies among parties in a manner that promote the feeling of obligation in employees to revert back with higher investment of personal energies in their work roles for such benefits. This viewpoint is in line with previous research studies that organizational attention and care towards its human capital for improving employee productivity may lead to employees' high levels of energy, dedication, and involvement, i.e. work engagement (Karatepe, 2012). Thus, consistent with the existing research the study in the context suggests that high-performance HR practices are significantly and positively associated with effective engagement initiatives by employees.

The purpose of the present study was to test a model (M2) that includes high-performance HR practices, psychological climate, and an individual difference factor i.e. work engagement in order to explain possible antecedents of OCBs, within the framework of social exchange theory. It was proposed (hypothesis 8) that work engagement would mediate the influence of high-performance HR practices and psychological climate on OCBs. The results of the study confirmed full mediation of work engagement on the impact of high-performance HR practices and psychological climate on OCBs. Accordingly, engagement is regarded as a proximal construct that reflects how employees feel about their work contexts, and that in turn may function as a bridge that connects organizational resources (high-performance HR practices and positive work environments) to relevant organizational behaviors, i.e., OCBs. In other words, work engagement shares a close connection with high-performance HR practices and climate perceptions that in turn, can stimulate employees to display citizenship behaviours.

The present study focuses on work engagement as it is grounded in an employee's unique experiences of work (i.e. positive climate perceptions) and that it represents the behavioral manifestation of a cognitive and emotional interpretation of work related environmental inputs and outcomes (Shuck et al., 2011; Shuck & Herd, 2012). The existing literature also suggests that work engagement mediates the relationship between job resources such as training opportunities, feedback, and task characteristics and individual and organizational outcomes (Schaufeli & Bakker 2004). These job resources are provided to employees within the setup of HR policies, practices, and strategic interventions to promote organizational performance. The findings suggest that work engagement is an outcome of high-performance HR practices. Though high-performance HR practices influence work engagement directly and indirectly as well through

employees' experimentation and meaningful representation of the perceptions of their working conditions, work engagement is also seen as the individual difference variable which would possibly enhance the citizenship performance at work place by sharing deeper connections with psychological climate.

The findings indicated high-performance HR practices as a heading source in promoting citizenship performance at workplace. Psychological climate and work engagement were observed as key mediating variables in the relationship between high-performance HR practices and OCBs. No direct relationship was observed between high-performance HR practices and OCBs, when psychological climate and work engagement were tested for their mediating effects in the proposed relationship. Instead, psychological climate was found to mediate the relationship between high-performance HR practices and work engagement in part, and work engagement in its turn, was ascertained as having full mediating effects for the influence of high-performance HR practices and psychological climate on OCBs. However, high-performance HR practices as a whole was also observed as having direct influence on employees' work engagement. It appears the principal mechanism through which high-performance HR practices and psychological climate affect OCBs is work engagement. These results add to our understanding of the work engagement of IT employees and also add to the literature focused on work engagement in IT organizations, thus extending the evidence base in India's fast developing economy.

The cross-lagged research design helped in assessing the temporal ordering of high-performance HR practices, psychological climate, and work engagement as antecedents of OCBs. And, the results provide clear evidence that the above said factors are the antecedents of OCBs. Importantly, this study demonstrates that IT employees choose to perform organizational citizenship behaviors depending on the basis of how well their psychological needs, aspirations, and preferences are met in the organization. The focus of organizations on HR practices when moves to employee-centered HR practices, enables the IT workforce to perceive their work environment in a better way based on the experimentation with and evaluation of the working conditions in relation to their own well-being. In positive working conditions, they will find means to satisfy their own preferences and aspirations while feeling themselves meaningfully attached with and absorbed in their work roles thereby creating the foundation for highly productive employment relationship. All these conditions set the stage for establishing social exchange mechanism and creating reciprocal interdependencies among parties involved in

obligatory relationship which may enhance employee readiness to take the extra efforts and voluntary initiatives in order to meet organizational objectives.

Hence, the organizational practitioners are suggested to implement high-performance HR practices that facilitate positive psychological climate and foster work engagement, and consequently drive employees to exhibit OCBs. Depicted from the evidences of the present study, HR managers need to be aware about the significance of psychological aspects of work environment that may intrinsically motivate employees to invest their inclusive self in performing job duties.

Chapter V

Conclusion

This chapter begins with the conclusion to provide the highlights of the study. Thereafter, it lists the contributions made by this research. The chapter then discusses how the significant results of the hypotheses tests have implications for organizations. This is followed by limitations of this study. The recommendations for future research are made in the concluding section.

5.1 CONCLUSION

Organizations immensely concentrate on attracting and retaining extraordinary employees who are not only capable and willing to perform job tasks efficiently but also are keen to voluntarily invest extra efforts in their jobs through which achieving and sustaining organizational effectiveness is viable. Moreover, effective functioning of an organization depends on employees' efforts extending beyond the formal job requirements (Barnard, 1938; Katz & Kahn, 1978; Organ, 1988; Yen & Niehoff, 2004). Following this, the aim of the present study is to enrich our understanding of OCB in the IT setting by examining the least explored factors that may enhance these behaviors among IT professionals in India. Specifically, the study examines the occurrence of OCBs by looking into employees' perceptions of strategic HR interventions, psychological climate and work engagement as potentially important antecedents of OCBs.

This study not only contributes towards identifying the antecedents of OCBs in an Indian sample of working population in IT organizations but also goes a step further in employing them for testing a proposed conceptual model. The development of conceptual model in this research was part of a broader aim establishing the framework of OCB for IT organizations in India, which has been identified a needed area of study (Chiang et al., 2013). In this endeavor, the present study attempts to develop a model that explains the mechanism underlying the relationships between high-performance HR practices, psychological climate, work engagement, and OCBs. The model proposes psychological climate and work engagement as mediators in the relationship between high-performance HR practices and OCB.

The present study among IT professionals in India provides evidence for an overall model that examines the antecedents of OCBs. Furthermore, this is one of the first studies that examined the role of high-performance HR practices, psychological climate, and work engagement for OCBs in Indian context. Psychological climate was found to partially mediate the relationship between high-performance HR practices and work engagement. And, work engagement fully mediated the impact of high-performance HR practices and psychological climate on OCBs. By examining the mediating role of work engagement with high-performance HR practices, psychological climate and OCBs, this study broadens previous research by supplying evidence that work engagement fully mediates the relationship of high-performance HR practices, psychological climate with OCBs for an Indian sample of working population in IT organizations. These findings thereby extend research that has so far focused mainly on the job attitudes or employee satiation processes such as job satisfaction as mediators of the relationship between high-performance HR practices, psychological climate and OCBs.

5.2 CONTRIBUTIONS OF THE STUDY

The significance of this research lies in the contributions it makes towards theory and for practicing managers. These contributions are discussed hereafter.

5.2.1 Theoretical Contributions

This study is an important contributor to the field of high-performance HR practices, psychological climate, work engagement, and OCB. It is one of the few studies where all the four variables of high-performance HR practices, psychological climate, work engagement, and OCB are investigated in a single study.

The results provide a greater understanding of the antecedents of OCB in IT organizations. Because previous studies did not explain how high-performance HR practices, working climate, and employees' work engagement directly influence OCBs. The study explored the associations between high-performance HR practices, psychological climate, work engagement, and OCB for further developing a mechanism for OCB with the help of research findings, logics and suppositions in the extant OCB literature. The study investigated how psychological climate and work engagement mediates between high-performance HR practices and OCBs. This addition to previous efforts is important because OCB focuses on employees' perceptions of high-performance HR practices. Also, how employees demonstrate their cognitive evaluation and meaningful

formations of the immediate working environments and sense of personal well-being in terms of work engagement that ultimately govern employees' OCBs. Second, only a few past studies have examined the influence of employees' perceptions of sets of high-performance HR practices on their workplace performance. This research attempts to fill this general absence of empirical research in IT organizations. With the observation, organizations in India are becoming highly adaptive to the increasing role of human resource management function and are keen to focus on HR practices that are geared towards elevated organizational effectiveness, it is important to ascertain employees' perceptions of transformations in the field of human resource management initiatives and performance-enhancement exertions with the help of high-performance HR practices execution in these organizations and to know the effects of employees' perceptions of such incentive initiatives on their work engagement and enterprisingness towards organizational effectiveness in terms of OCBs. This research explores the changing dynamics of Indian business scenario in context of IT organizations. This is because IT professionals may perceive and react differently to human resource management system in the organization and have higher expectations of congenial working conditions that enhance their capability to employ personal skills and resources in the realization of organizational goals. Thus, the study tries to tap their experiences and perceptions and map their performances in the organization.

The significance of the findings was enhanced by qualifying the mediating role of psychological climate in the relationship between high-performance HR practices and OCBs, which have been less focused in previous researches explaining the psychological process of employee involvement in OCBs (Wei et al., 2010). In this research, the psychological well-being indicator that has been assumed as having a close connection with psychological climate perceptions of employees i.e. work engagement representing the active psychological state of employees' positive mind has also been identified as important precursor of OCBs and thus explored for its mediating influence on the role of high-performance HR practices, psychological climate in promoting OCBs at workplace. To the researcher's best knowledge, it is one of the first attempts on establishing the framework for OCB in IT organizations with the inclusion of high-performance HR practices, psychological climate, and work engagement.

5.2.2 Practical Contributions

A better understanding of the outlook and perceptions of employees towards organizational HR orientation and environmental cues can therefore provide important information to managers. Particularly, HR managers can be motivated to open up new avenues to employees to be psychologically involved in work roles and to feel highly motivated to bring their good spirits at the workplace in order to benefit the organization at large. Also, IT organizations while preparing managers for delegating roles and responsibilities to employees need to pay attention towards factors like changing technologies, exceeding role expectations, and insecurities at workplace. As such circumstances have created a need for employees to look for socio-emotional support for optimal functioning such as quality supervision, development feedback, empowerment, elementary directions as well as non-violation of their right to be respected and treated with dignity at workplace. Organizational focus on these factors may provide employees with psychological safety and support at work and consequently they may feel internally motivated to be highly engaged with work and may even encourage OCBs for organizational efficiency.

This study provides insights into why the IT employees are willing to exhibit OCBs. Employees in this study reported that they perceived organizational focus on developing its human capital which is found be associated with their increased involvement in OCBs through favorable work climate sensing and experiencing an enhanced state of well-being at work. This makes taking care of employee psychological well-being imperative in the war of talent. It is highly recommended that organizations should adopt a strategic human resource management approach towards their human capital performance that emphasizes the importance of employees' positive workplace experiences and well-being at work in order to advance employees efforts made in favor of increased organizational effectiveness. It is a recognized fact that an organization cannot achieve its objectives efficaciously if employees limit their contributions to the organization to its prescribed job requirements. It is vitally necessary that employees not just conform to the accepted standards of the job descriptions and work activities, but surpass the set boundaries of their jobs and transcend their performances up to their full potential. The findings indicate that employees' positive evaluations of the work contexts nurtures the tendency of bringing positive, active psychological state of mind at work that

can further provide boosterism to their willingness and expressions in organizationally beneficial behaviours.

From a practical point-of-view, promoting OCBs can be achieved- amongst others- by designing an HR system that incorporates positive practices at workplace like advancement of corporate communications to augment employees' perceptions of organizational support and justice, designing incentive based compensation system to reward high-performing employees, considerations to person-role fit, appropriate job (re)design, and employment security in order to create psychologically safe working conditions (Kataria, Garg, & Rastogi, 2013). Furthermore, creating psychological conditions of availability in terms of providing resourceful work environments may also enhance the display of OCBs. In addition, employees should be psychologically empowered to perform OCBs that takes in to account organizational efforts to provide meaning in their work, opportunities to develop, and increased occupational self-efficacy. Recent studies posit a great incremental value on employees' work engagement and that enforce HR managers to design the HR system keeping in mind employees' psychological needs and concerns at workplace that may include a greater emphasis on job design, support from management, development opportunities, fair and equity at workplace, and a resourceful working environment to motivate employees reciprocate with high engagement level with their work. Work engagement can also be achieved by focusing on employees' perceptions of the organizational commitment towards their well-being at work and the support they receive from the organization. Further, managers must set the stage for engagement by designing effective jobs that include motivating characteristics with regard to significance and variety (Christian et al., 2011). They also need to provide employees resources and benefits that oblige them to reciprocate in kind with higher levels of engagement (Saks, 2006). The relationship found between work engagement and OCBs is insightful, because based on that knowledge, attempts should be made through selection to hire employees predisposed to engagement (Christian et al., 2011).

5.3 LIMITATIONS AND FUTURE SCOPE OF RESEARCH

Although the findings of this study are in line with the developed theory, the study has some limitations that can be addressed in future research. The generalizability of the study's findings might be limited. The present study was conducted in the specific context of IT organizations in India. However, the immediate working environment could differ significantly across industries. Future research could investigate whether results of this

study generalize about the other organizational settings. There may also be some concerns regarding the generalizability of these findings to other cultural contexts.

Further, the self-report nature of the data used for the study, common source error may exist even if employees are the best choice for answering these questionnaires. Although common source error was found to be insignificant based on the CFA assessment in the study, the possibility of this error cannot be all together discounted. It is still important to avoid any possible common source error and to acquire more reliable data for testing the study hypotheses. The mediation model tested in the current study need to be replicated using longitudinal study designs in order to establish more certain causality of the relationship between the key constructs of particular interest.

Another important area of future research is to further analyze the research model using peers and superiors' ratings of employees' OCBs, as the present study only accounts for employees' self-ratings of their OCBs. To conduct a more complete evaluation for reflecting the real situation, future studies need to collect data from multiple sources. Further, the present study have focused on climate indicators of psychological needs of meaningfulness and safety, future studies could investigate workplace indicators concerning employees' psychological need of availability at work such as job resources in relation to the hypothesized relationships.

The fact that the study did not find direct influence of high-performance HR practices and psychological climate on OCBs, suggests that other mediating, moderating variables may be pertinent such as psychological empowerment, LMX. Researchers should also be encouraged at the possibility of exploring individual and organizational peculiarities that are likely to function as regulative aspect of engagement and influence the extent to which they are motivated to exhibit organizational citizenship behaviors.

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Annexure 1

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE DEPARTMENT OF HUMANITIES & SOCIAL STUDIES

Dear Participants

In order to achieve and sustain organizational effectiveness, through employees' increased contributions, organizations, apart from task proficiency, becoming increasingly reliant on employees' discretionary efforts at workplace. To take part in their potent inclination, this study intends to explore the role of high-performance HR practices, psychological climate, and work engagement on organizational citizenship behaviours.

In this direction the attached questionnaire is a tool to help us understand your perceptions about the above said factors as you have work experience in the organization. Your responses will add value to our research as well as to the existing literature. No individual data will be released to anyone and aggregate responses shall only be used for academic purposes.

Thank you in anticipation, for your helpful response.

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Instrument for data collection

Thanks for being willing to take time to fill this questionnaire. The information provided here will be kept confidential and will only be used for academic purposes. Please be open and honest in your responses.

Personal Information

Name:	Present Organization:
Age:	Designation:
Gender:	Tenure With Organization:
Marital Status:	Total Work Experience:
	Educational Qualification.

Below are the statements that you may agree or disagree with.. To the right of each you will find seven numbers, ranging from "1" (Never) on the left to "7" (Always) on the right. Circle the number which best indicates your feelings about that statement.

High-performance HR practices

Circle the number in the appropriate column	Never			Always			
Our organization fills vacancies with people already employed at the organization.	1	2	3	4	5	6	7
Our organization has a well-designed development program.	1	2	3	4	5	6	7
Our organization offers employees diverse training programs for different training needs.	1	2	3	4	5	6	7
Our organization structures training process systematically.	1	2	3	4	5	6	7
Our organization encourages employees to undertake continuous training.	1	2	3	4	5	6	7
Our organization provides individuals extensive training programs in order to increase general skills.	1	2	3	4	5	6	7
Our organization provides employees with job security.	1	2	3	4	5	6	7
Our organization expects employees to stay in organization as long as they wish.	1	2	3	4	5	6	7
Our organization emphasizes employee participation.	1	2	3	4	5	6	7
Our organization provides employees the	1	2	3	4	5	6	7

Circle the number in the appropriate column	Never				Always		
opportunity to suggest improvements in the way things are done.							
Our organization keeps open communications with employees in their jobs.	1	2	3	4	5	6	7
Our organization allows employees to participate in many decisions.	1	2	3	4	5	6	7
Our organization makes extensive efforts to select the right person.	1	2	3	4	5	6	7
Our organization uses panel interviews to select new employees.	1	2	3	4	5	6	7
Our organization adopts fair procedures in selection.	1	2	3	4	5	6	7
Our organization considers the similarity of candidate's personality and organizational culture.	1	2	3	4	5	6	7
Our organization emphasizes employee prior work experiences.	1	2	3	4	5	6	7
Our organization has a competency-based pay system.	1	2	3	4	5	6	7
Our organization offers bonuses based on team performance.	1	2	3	4	5	6	7
Our organization offers pay levels competitive with those of competitors.	1	2	3	4	5	6	7
Our organization grants bonuses based on the profit of the organization.	1	2	3	4	5	6	7
Our organization involves employees in calculating their compensation base.	1	2	3	4	5	6	7

Psychological Climate

Circle the number in the appropriate column	Strongly Disagree				Strongly Agree		
My boss is flexible about how I accomplish my job objectives.	1	2	3	4	5	6	7
My manager is supportive of my ideas and ways of getting things done.	1	2	3	4	5	6	7
My boss gives me the authority to do my job as I see fit.	1	2	3	4	5	6	7
I'm careful in taking responsibility because my boss is often critical of new ideas.	1	2	3	4	5	6	7

Circle the number in the appropriate column	Strongly Disagree				Strongly Agree			
	1	2	3	4	5	6	7	
I can trust my boss to back me up on decisions I make in the field.	1	2	3	4	5	6	7	
Management makes it perfectly clear how my job is to be done.	1	2	3	4	5	6	7	
The amount of work responsibility and effort expected in my job is clearly defined.	1	2	3	4	5	6	7	
The norms of performance in my department are well understood and communicated.	1	2	3	4	5	6	7	
I feel very useful in my job.	1	2	3	4	5	6	7	
Doing my job well really makes a difference.	1	2	3	4	5	6	7	
I feel like a key member of the organization.	1	2	3	4	5	6	7	
The work I do is very valuable to the organization.	1	2	3	4	5	6	7	
I rarely feel my work is taken for granted.	1	2	3	4	5	6	7	
My superiors generally appreciate the way I do my job.	1	2	3	4	5	6	7	
The organization recognizes the significance of the contributions I make.	1	2	3	4	5	6	7	
The feelings I express at work are my true feelings.	1	2	3	4	5	6	7	
I feel free to be completely myself at work.	1	2	3	4	5	6	7	
There are parts of myself that I am not free to express at work.	1	2	3	4	5	6	7	
It is okay to express my true feelings in this job.	1	2	3	4	5	6	7	
My job is very challenging	1	2	3	4	5	6	7	
It takes all my resources to achieve my work objectives	1	2	3	4	5	6	7	

Employee Engagement

Circle the number in the appropriate column	never	almost never	rarely	sometimes	often	very often	always
1. At my work, I feel bursting with energy.	1	2	3	4	5	6	7
2. At my job, I feel strong and vigorous.	1	2	3	4	5	6	7
3. When I get up in the morning, I feel like going to work.	1	2	3	4	5	6	7

Circle the number in the appropriate column	never	almost never	rarely	sometimes	often	very often	always
4. I am enthusiastic about my job.	1	2	3	4	5	6	7
5. My job inspires me.	1	2	3	4	5	6	7
6. I am proud of the work that I do.	1	2	3	4	5	6	7
7. I feel happy when I am working intensively.	1	2	3	4	5	6	7
8. I am immersed in my work.	1	2	3	4	5	6	7
9. I get carried away when I am working.	1	2	3	4	5	6	7

Organizational Citizenship Behaviour

Circle the number which best indicates your feelings about the statements given below. To the right of each you will find seven numbers, ranging from "1" (strongly disagree) on the left to "7" (strongly agree) on the right.

Circle the number in the appropriate column	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
1. I help others who have heavy workloads.	1	2	3	4	5	6	7
2. I give my time to help others with work problems willingly.	1	2	3	4	5	6	7
3. I help others who have been absent.	1	2	3	4	5	6	7
4. I take steps to prevent problems with other workers.	1	2	3	4	5	6	7
5. I try to avoid creating problems for co-workers.	1	2	3	4	5	6	7
6. I am mindful of how my behavior affects other people's job.	1	2	3	4	5	6	7

Circle the number in the appropriate column	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
7. I keep up with developments in the company.	1	2	3	4	5	6	7
8. I keep abreast of changes in the organization.	1	2	3	4	5	6	7
9. I read and keep up with organization memos, announcements, etc.	1	2	3	4	5	6	7
10. I do not take extra breaks.	1	2	3	4	5	6	7
11. I do not take unnecessary time off work.	1	2	3	4	5	6	7
12. My attendance at work is above the norm.	1	2	3	4	5	6	7
13. I consume a lot of time complaining about trivial matters.	1	2	3	4	5	6	7
14. I tend to make "mountains" out of molehills.	1	2	3	4	5	6	7
15. I always find fault with what the organization is doing.	1	2	3	4	5	6	7