

IMPACT OF HIGH PERFORMANCE HR PRACTICES ON IN-ROLE AND EXTRA-ROLE BEHAVIOUR OF EMPLOYEES WITH MEDIATING ROLE OF EMPLOYEE ENGAGEMENT

*Brijesh Kishore Goswami, Prof. Yogesh Upadhyay

*Assistant Professor, IBM, GLA University, Mathura
Research Scholar, School of studies in management, Jiwaji University, Gwalior, Email:
brijeshksgoswami@gmail.com

** Professor, School of Studies in Management, Jiwaji University, Gwalior,
Vice Chancellor, ITM University, Barodara, Email: yogesh400@gmail.com

Abstract

Purpose

Health care organization is a complex service organization dominated by highly professional's work force at every level. Enhancing the in role and extra role behavior of employee is the prime concern today. Majority of health care organization are following different permutation and combination of high performing human resource management practices to enhance in role and extra role behavior of employee. The aim of present paper is to identify High Performing Human Resource Management practices and assess its Impact on in-role and extra-role behaviour of employees with mediating role of employee engagement.

Design/methodology/approach

Descriptive research design has been used by the researcher in the present research work. The objective of the study and hypothesis was tested through collecting data for the problem under investigation using survey method. Structured questionnaire covering different dimension of objective was piloted on 311 employee associated with healthcare organization located at Agra, Mathura and Vrindavan of UP state. Factors of high performing human resource management were identified and its relative strength in motivating employee for in role and extra role behavior was tested statistically using SPSS software. Regression analysis and Sobel test was carried out to assess the mediating role of employee engagement in the relationship between High Performing Human Resource Management practices and in-role and extra-role behaviour of employees. For testing statistical significance and testing the proposed hypothesis SPSS 22 software was used.

Findings

Outcome of the research finding indicates that High Performing Human Resource Management practices have significant effect on in-role and extra-role behaviour of employees. Test statistics support the hypothesis that employee engagement mediates the relationship between High Performing Human Resource Management practices and in-role and extra-role behaviour of employees.

Originality/value

Healthcare industry is a complex industry consisting of technological oriented and high professional work force. Identification of high performing human resource management practices strengthen the in role and extra role behavior of employee and thus enhance greater citizenship behavior of employees. Realization of management towards effective HPHRM practice in combination with employee engagement will definitely enhance in role and extra role behavior and helps in achieving indented outcome.

Keywords:

High Performing Human Resource Management Practices, Employee engagement, in role behavior, extra role behavior. etc.

Introduction

It is a universally accepted truth that any organization's success depends solely on the skillful use of its human resources. Even in the modern world, an entity may possess sufficient financial resources and acquire physical resources with the latest technology as needed, if the human organization of the concern is not powerful enough, it would find it difficult to handle its affairs. Globalization and fierce competition have led to new ways to improve their internal effectiveness. Human knowledge is unique, is compatible with all internal resources and can be a greater strategic source (Barney and Wright 1998). Literature on human resource management (HRM) highly appreciated the use of HRM techniques to provide the attitude and behavior of employees in order to improve business performance. The resource-based theory emphasized the need for companies to implement HRM strategies that can be easily inimitable and enable workers to generate added value for businesses to succeed on the market (Wright & McMahan, 1992). HRM studies showed many HRM programs that are helpful to workers and organizations such as the High Performance Human Resource (HHR) model (Huselid, 1995), a highly dedicated human resource system and a high level of human resource engagement system (Guthrie, 2001). In particular, the HHR program is one of the most interesting topics explored to enhance the performance of the employees. The Resource-Based View (RBV) of organizations (Barney and Wright, 1998) and the Social Exchange Theory (Blau, 1964) have shown considerable interest in improving organizational efficiency through their employees through research into Strategic Human Resources Management (SHRM). High performance management (Appelbaum et al. 2000) is one of the new SHRM strategies for this purpose, designed to empower people by concentrating on quality and adapting to rapidly changing circumstances with innovation, imagination and problems solving skills.

Relationship between High Performance Human Resource Practices and in-role and extra-role behaviour of employees

Many advantages of high-performance human resource practices were reported in the literature, such as enhancing the effectiveness of organization's activities (Daspit et al., 2018), developing employees' knowledge, skills and abilities (Kooij and Boon, 2018; AlHawary, 2015), empowering and motivating staff (Combs et al., 2006 and Glaister et al., 2018). Examples of such practices include employee selection and recruitment, performance assessment, intensive training, performance-based promotion and incentives (Daspit et al. (2018; Al- Hawary, 2011), performance assessment and information sharing (Kooij and Boon, 2018). Wayne et al. (1997) examined the effects of HRM practices on in-role and extra roles of organizational support and on the accuracy of LMX's results. In Pare and Tremblay (2007), research work analyzed the impact of HRM activities on employee management's intent to leave and improve organizational engagement and non-roles. Wruit et al. (2003) have correctly concluded that workers loyalty to their organizations can be expected to have less negative behavior than those less involved, on the one hand, and to take part in better extra tasks and activities. The paper suggests that HRMs influence the understanding of workers and further practical behavior (Gould-Williams, 2007). But in a model in which organization trust and organizational support are the mediating factors, the effect of HRM strategies on extra-fund behaviour. The present study examines the relation between the practice of HR and actions outside the context of organizational responsibility, trust and support as intermediary variables as intermediate variables as intermediate variables.

The findings of previous research found that the outcomes of the organizational interaction are strongly linked to training and development and the external roles. Training and development aims to improve the key areas that are needed to carry out these activities efficiently, such as the expertise, skills and attitudes of staff. Education has also been reported to affect the psychological status of workers by voicing an understanding of their interests, their level of engagement and the outcomes of the Organizational Engagement in Extra-Role Behaviors (Noor, A. 2009).

Employee Engagement and its relationship with in-role and extra-role behaviour of employees

Employee engagement is an employee's love and devotion to his work. Kahn (1990) defined job participation as using the selves of members of the organization. People work physically, cognitively and emotionally in participation and express themselves through their function performance. Kahn's commitment theory is motivational, since it relates to personal resources being allocated for role success and to the way these resources are used intensively and persistently. Employee engagement emphasizes on the positive aspects of a worker's job. Employee engagement is workers' willingness and ability to help their companies succeed, primarily through discretion. (Petit & Little, 2006). Employee engagement is also known as work enthusiasm involvement. The presence of workers increases extra role and in-role performance. The employee extra role behavior refers to the willingness of employees for the company to do more without receiving rewards for their additional work (Macey & Schneider 2006; Salanova et al

2011; Albrecht 2012). On the other hand, in role task performance refers to one's own capacity to control one's own job, which is required to deliver a level of performance (Halbesleben & Wheeler 2008). The two aspects (extra tasks and responsibilities) can be strengthened by creative working practices that are assisted by the high-performance management of human resources. Bailey et al. (2017) carried out systematic review of several literatures and explore the meaning, context and implications of participation. Author identified five types of determinants of commitment like leadership, job design, team-based and organizing influences, psychological and organizational strategies. It has been demonstrated that commitment is linked positively to four aspects of work: individual moral values, productive activities, organizational performance and productivity. Kim and Koo, 2017 review 48 studies and found that there was a statistically significant correlation between employee involvements in task performance. In forty six studies, author found that in role behavior among employee. In-role behavior also means the main task's actions. Probably Katz and Kahn first propose this description. Katz et al. believed that behavior in the business was a type of activity defined and established as part of employee work and reflected in the company's official pay system. Williams and Anderson defined in-role actions as all the behaviors required for the responsible work to be done. In general, the metrics used to measure employee performance are classified into five categories: ratings, quality measurement, quantity level and paper records, such as safety records, absentee records and delays. Katz clarified that management focus on preserving the identity of the member of the organization has a major impact on the successful functioning of the organization. Further , Kartz (1964) idea of extra role behavior was considered as organization citizenship behavior in 80s which has many positive effects, including support and voluntary behaviour, observed in the ethical job environment (Otake-Ebede, Shaffakat & Foster, 2019; Sguera & al., 2018). Based on this proposition, following hypotheses and proposed model was conceptualized:

H1: High Performance Human Resource Management Practices are positively associated with the In-role behavior of employees.

H2: High Performance Human Resource Management Practices are positively associated with the extra role behavior of employees.

H3: Employee Engagement mediates the relationship between High Performance Human Resource Management Practices are positively associated with the in role behavior and extra role behavior of employees

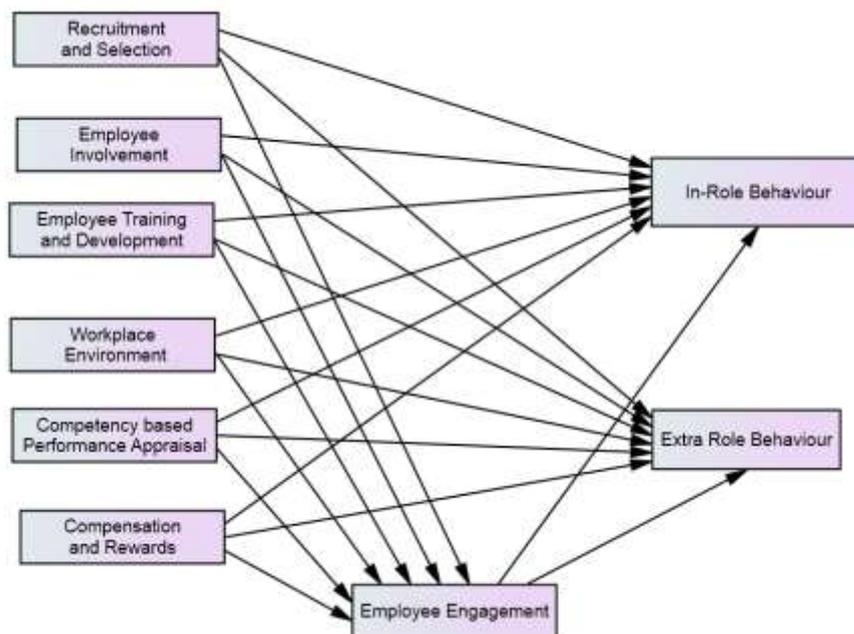


Figure 1: Employee Engagement and its relationship with in-role and extra-role behaviour of employees

Objectives of the Study and Research Methodology

Employee Engagement as a concept has been introduced in the organization to build favourable image about the job and to organizations. However, the value of employee engagement in the explanation of job performance compared to similar concepts is little known. The previous studies investigated the role of high performance human resource management practices in supporting the employee performance, there are limited studies which emphasized the role of various dimension for high performance human resource management practices supporting employee engagement and in-role as well as extra-role behaviour. With this into consideration, this project has been taken up with the following objectives;

- a. To explore the various dimension of High Performing Human Resource Management Practices
- b. To examine the effect of High Performing Human Resource Management Practices on in role and extra role behavior of employees working with health care organization.
- c. To examine the mediating/ moderating role of employee engagement in the relationship between High Performing Human Resource Management Practices on in role and extra role behavior of employees working with health care organizations

The main objective of this study was to investigate the relationship between high performing human resource management practices and its impact on employee engagement and in role as well as extra role behavior of employee working in health care organization in Uttar Pradesh and the hypotheses was developed based on this objective. The study was conducted by using a sample of 311 employees working in different health care organization located in Agra and Mathura district of Uttar Pradesh state. Descriptive research design was used for the proposed study. The current study was quantitative and a cross-sectional field study survey design was followed. Data was collected through a structured questionnaire. Employee was invited to participate in the study through survey method. A structured questionnaire was designed covering different dimension of high performing human resource management practices, employee engagement and in-role as well as extra role behavior of employees the construct for the study were identified on the basis of secondary literature and studies done in the past. After identifying the construct, measurement variable were developed. High performing human resource management practices were identified from the research work of authors like Kooij and Boon's (2018), Kehoe and Wright (2013) practices in healthcare organization on the basis review of secondary literatures. Employee engagement behavior were identified from the work of Garber, P.R. (2012), Schaufeli, W.B., Salanova, M., Gonzalez-Roma V., Bakker, A.B. (2002) and in role behavior and extra role behavior were developed from the work of Turnley and Feldman (2000), Somech (2006), Griffin et al. (2007). The most known safety and welfare practices, Motivation Theories, and retention were studied. We aimed to collect general information about each construct and measurement variable were developed for each construct. Majority of the questionnaire reviewed from secondary literature were modified by the researcher in the context of specific problem under investigation. Questionnaire designed in two parts. First part consists of demographic characteristics of respondents. Second part includes variable like High performance human resource management practices, employee engagement and in role as well as extra role behavior on the employee. Five point likert scale ranges from 1 to 5 (1 = strongly disagree and 5 =strongly agree). Employee were asked to rate the statement on a scale of 1 to 5. Questionnaire was distributed to 400 employee association with different health care organizations who were contacted personally, with a final valid 311 responses being used in this study. The questionnaire consists of two parts. In order to ensure the validity of the survey instrument, the initial questionnaire was sent to a panel of experts and faculty members to determine the validity of the survey instrument, the consistency of its purpose and to ensure its ties with the study objectives. In order to validate the reliability, 35 respondents, comprising 11,2% of the total sample size, who were deemed to be members of the study population, checked the questionnaire as a pilot. The value of Cronbach's alpha was found to be 0.858, which means that the questionnaire is appropriate. Full scale analysis was carried out and the data was manually collected, tabulated, and analyzed using SPSS 22 after reliability and validity assurance. The data analysis provides descriptive statistics for the mediation impact evaluation using SPSS 22 and regression analysis. The demographic characteristics of respondents are shown in Table 1.

Table1: Demographic Characteristics of Respondents

	<i>Categories</i>	<i>Count</i>	<i>Percentage</i>
		311	100

Age	Upto 25 years	65	20.9
	From 26 to 35 years	105	33.8
	from 36 to 45 Years	68	21.9
	From 46 to 55 Years	56	18.0
	Above 55 Years	17	5.5
Gender	Male	208	66.9
	Female	103	33.1
Marital Status	Married	212	68.2
	Unmarried	99	31.8
Education Level	Under Graduate	19	6.1
	Graduate	156	50.2
	Post Graduate	41	13.2
	Professionals	95	30.5
Income Level	Upto Rs. 20000 P.M.	48	15.4
	From Rs. 20001 to Rs. 40000 P.M.	84	27.0
	Rs. 40001 to Rs. 60000 P.M.	103	33.1
	Above Rs. 60000 P.M.	76	24.4
Area Specializations	Medical	43	13.8
	Technical	12	3.9
	Administration	22	7.1
	Nursing	211	67.8
	Others	23	7.4
Period of Association	Upto 3 years	161	51.8
	From 04-5 Years	87	28.0
	from 6 to 10 years	61	19.6
	More than 10 years	2	.6

Information presented in the above table indicates that sample is dominated by the respondents who are in the age group of 26-35 years as it was indicated by 33.8% respondents in the sample. 21.9% employee is in the age group of 36-45 years. 18% respondents are in the age group 46-55 years. 5.5% respondents indicated that they are in the age group above 55 years. Remaining 20.9% respondents are in the age of 25 years and below. Majority of the employee are male and married categories as it was indicated by almost two third respondents in the sample. Survey indicates that sample consists of good educated people as 43.7% employee are having post graduation or having professional degree to their credit. Major portion of sampled respondents are in the income group of Rs. 40001-60000 PM as it was indicated by 33.1% of the respondents. Remaining 15.4%, 27.0% and 1.2% respondents respectively indicated that they are earning upto Rs. 20000 PM, From Rs. 20001 to Rs. 40000 PM and Above Rs. 60000 PM. . Majority of the samples respondents are from nursing profession as it was indicated by 67.8% respondents in the sample. Sample is the combination of fresher candidate as 51 % respondents indicated that they are having upto 3 years of experience in the present organization. This signifies that sample is the combination of diverse demographic group of respondents.

Table 2: High Performance Human Resource Management Practices: Descriptive Statistics

	N	Maximum	Mean	Std. Deviation
Recruitment & Selection		.751	3.0429	.77745
My organization disseminates extensively information on both external and internal selection processes.	311		3.0096	1.19268
My organization dissimulates information about the recruitment process's steps and requirements.	311		3.1543	1.06346
At the conclusion of the selection process, my organization reports outcomes of success to applicants.	311		2.4952	.74432
Organization selection tests are carried out by educated and unbiased individuals.	311		2.8682	1.23862

My organization has efficient selection processes that attract competent individuals	311		3.2508	.83943
My company uses different selection methods.	311		2.9068	1.22382
Employee Involvement		.617	3.1716	.66009
My organization treat me with respect and attention and care about my well being	311		2.8842	1.32693
There is policy of job rotation to reduce redundancy	311		2.6752	.95748
There is a culture of understanding and trust between organization's managers and employees.	311		3.1447	1.12807
The organization's appreciation of the job I do and the performance I do.	311		3.3119	1.18151
My company strives to fulfill my needs and professional standards.	311		2.7138	1.06791
My organization and its superiors frequently exchange information to efficiently carry out their duties.	311		3.4920	1.14121
My company encourages my engagement in decision-making and problem-solving.	311		3.2669	1.31351
Employee Skill and Training		.669	3.1334	.81108
My organization empower employee to connect.	311		3.2765	1.26519
Employee is well trained and can use their skills at the workplace.	311		3.0868	.90278
My organization helps me to develop the skill needed to successfully perform my duties.	311		2.7074	1.06918
I work for an organization that invests a lot in my learning development	311		3.2765	1.31765
In my organization training outcome is assessed by participants.	311		3.1801	1.71136
My organization encourages me to learn and apply knowledge and skill gained from training.	311		2.9003	1.06545
Workplace Environment		.554	3.0657	.62160
My organization emphasis more on providing basic benefits like health care, transportation assistance, food aid, etc.	311		3.0900	1.26425
The organization encourages a participatory work culture.	311		2.5273	1.25662
My organization has systems or procedures that help employees to deal with injuries and prevent accidents at work	311		3.2186	1.35496
My organization is concerned with the safety of its employees at company premises	311		3.2090	1.18786
My organization provides additional fringe benefits	310		3.1548	1.13287
My organization takes care of physical condition and work for ergonomic, employee comfort ability.	311		3.1865	1.21971
My health and quality of life is taken care in the organization	311		3.3601	3.52762
Competency based Performance Appraisal		.451	3.0875	.66648
My organization works with its staff to address competency-based performance evaluation requirements and outcomes	311		3.1833	1.17577
In my organization, employee development plan is based on competency-based performance appraisal systems.	311		3.3505	1.17060
within my company, competency-based performance evaluation is the basis for advancement decisions and salary increases	311		2.8328	1.09737
My organization works to disseminate competence-based assessment performance standards and outcomes for employees	311		2.9453	1.05963
My organization performs competence-based assessments of performance regularly for its employee's competence-based assessment.	311		3.1576	1.44276

Compensation and Rewards		.606	3.1936	.74744
employee incentives such as promotions, commissioned functions, awards, bonuses, etc. of my organization is at par in the industry	311		3.0450	1.30182
Performance based salary and incentives are followed principally in the organization.	311		3.0643	1.19504
My salary and benefits is compatible with my skills, training, and education in the industry	311		3.1994	1.07109
Rewards system in the organization is considered as per the employee potential.	311		3.2508	1.11650
Merit based promotion and Performance based Pay are promoted in the organization	311		3.4084	1.29408

HRM practices were inspired by the belief that a mix of HR methods could be established that could improve the performance of companies of all kinds facing any circumstances. Previous literature indicates that several factor like recruitment and selection, employee engagement, employee skills and training, workplace environment, competence-based performance evaluation and compensation and Rewards were identified and measurement variable were developed for evaluating the high performing human resource management practices. The confirmatory factors and associated variable as presented in the table 5 reflect high performance human resource management practices. Descriptive statistics was calculated by using SPSS software. Looking at the mean and standard deviation (SD) one can conclude that High Performance Practices like Compensation and Rewards has score highest mean ($m=3.1936$ and $SD=.74744$) followed by Employee Involvement ($m=3.1716$ and $SD=.66009$). High standard deviation of the factors such as Employee Training and Development ($SD=.81108$) indicates that employee opinion on this factor is not homogenous. Looking at the descriptive statistics of HPHRM Practice, combined mean was found to be 3.1158 and ($SD =.41413$).

Table3: Employees Engagement Practices: A Descriptive Statistics

Employee Engagement		.755	3.1679	.66222
I feel like getting to work when I get up in the morning.	311		3.1897	1.24668
I always go to work, even if things go wrong.	311		3.2283	1.98607
I feel fit and strong when I work.	311		3.5177	1.08309
I'm really excited about my career.	311		3.4920	.96675
I'm proud of the work I'm doing.	311		3.2058	1.18435
I think the work I do is useful and meaningful.	311		3.1865	1.32127
When I work, time passed by flies.	311		3.0772	1.18886
I've got a hard time getting loosened from school.	311		2.9518	1.19174
Throughout my job, I am totally absorbed.	311		2.7588	.98523

Employee engagement is basically a work place strategy that provides an environment for workers to do their best to build on the basis of trust, honesty, two-way commitment and cooperation between a company and its members. Employee Engagement has gained significant importance for smooth functioning of businesses, and in this work the researcher has evaluated several variables leading to greater employee engagement. Respondents were asked to rate the various employee engagement variables on a scale of 1 to 5. Descriptive analysis specifically mean and standard deviation was calculated using SPSS software and as presented in the above table indicates that variable like I feel fit and strong when I work.has scored highest mean of 3.5177 and $SD=1.08309$. It was followed by I'm really excited about my career with mean 3.4920 and $SD=.96675$. Higher SD (1.98607) of the factor like I always go to work, even if things go wrong indicates that respondents view on this issue is heterogeneous.

Table 4: In Role and Extra Role Behaviour

Combined mean (In Role and Extra Role Behaviour)		.858	2.7452	.83106
Intra Role Behaviour		.686	3.0836	.86819
I try to achieve every level of efficiency in my job.	311		3.3730	1.01080

I always support my high workload colleagues.	311		3.3023	1.33149
I try to fulfill the tasks set out in my job description.	311		3.0322	1.40239
I carry out the tasks expected in my role.	311		3.0997	1.20471
I should meet the expectations of success	311		2.6109	1.51330
Extra Role Behaviour			2.4068	.90630
I help colleagues who have a heavy workload or other issues.	311		2.1929	1.07527
I'm willing to do things that aren't up-to-date to hear from my profession, but to be in my team's interest.	311		2.0161	1.39922
I help a colleague who has a lot of work	311	.795	2.3730	1.44215
In the past, I started new tasks myself, when my old ones were finished.	311		2.3248	1.65802
In the past I took on challenging work tasks, when available	311		2.4920	1.06821
I willingly perform the job that is not part of a formal job description.	311		3.0418	.94776
Valid N (list wise)	308			

Nowadays, extra-role activity has become one of the primary organizational outcomes. Because in order to achieve their success; organizations need employees who are willing to do more work than what they are supposed to do. On the other hand, the employee's position behavior includes all the actions required for the fulfillment of the core duty of obligation. (Williams and Anderson). On the basis of a literature review, several calculation variables have been created to determine the extra position and job actions of the employee. Five measurement variables were chosen for evaluating in-role behavior and six measurement variables were developed for evaluating extra role behavior of employees. Employees were asked to rate on a scale of 1 to 5. Descriptive statistics (mean and SD) and reliability statistics was calculated using SPSS software as denoted in above table indicates that variable like I try to achieve every level of efficiency in my job has scored highest mean of 4.1353 followed by At my job, I am very mentally resilient With mean 3.3730. Higher SD (1.5133) of the factor like I should meet the expectations of success indicates that respondents view on this issue is heterogeneous. Combined mean of in role was found to be **3.0836 and SD-.86819**. **similarly we see that among all the variable indicating extra role behavior of employee variable, variable like I willingly perform the job that are not part of a formal job description has scored highest mean of 3.0418 and SD=.94776**. Chronbach alpha (α) was calculated with the help of SPSS software to assure the reliability of each component of employee in role and extra role behavior. Reliability of teach construct was found to be in the range of .686 to .858 indicating that construct are reliable enough to proceed for further statistical tests of significance.

Table 5: Impact of High Performance Human Resource Management Practices on In-role and Extra role Behaviour: Regression Analysis

Step	Dependent Variable	Independent Variables	Beta(β)	t-Value	Sig.	F-Value	R-Square	Results
1	Combined effect(In Role and extra role)	High Performing Human Resource Management Practices	.892	8.719	.000	76.030	.197	Significant
2	Employee Engagement	High Performing Human Resource Management Practices	.890	11.775	.000	138.643	.310	Significant
3	Combined effect(In Role and extra role)	Employee Engagement	.841	15.858	.000	251.458	.449	Significant

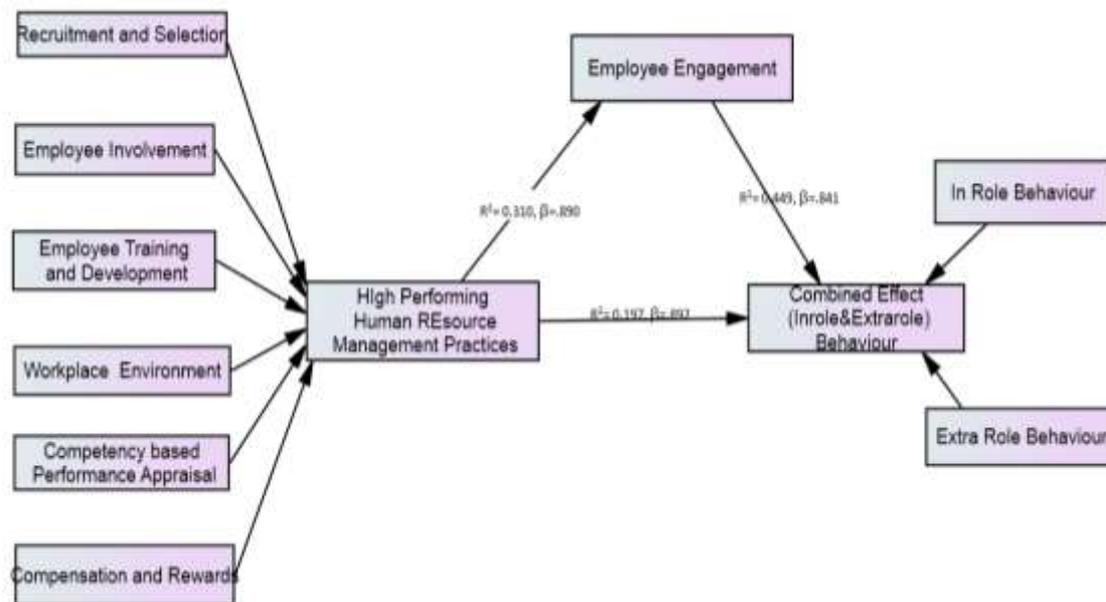


Figure2: High Performing Human Resource management Practice, Employee Engagement and in role and extra role behavior

While doing statistical modeling, regression analysis is the process of assessing the relationship between dependent variable and one or more independent variable (predictor). The most common form of regression analysis is linear regression, in which a researcher finds the line (or a more complex linear function) that most closely fits the data according to a specific mathematical criterion. In the present research work, regression analysis was carried out in to three steps. In the first stem combined effect(in role and extra role) behavior was taken as dependent behavior and High performing human resource management practices(HPHRMP) (combined mean of Recruitment and Selection, Employee Involvement, Employee Training and Development, Workplace Environment , Competency based Performance and Compensation and Rewards clubbed together) were taken as independent variable. In the second step, employee engagement was taken as dependent variable and HPHRMP was taken as independent variable. In the third step, combined outcome of in role and extra role behavior of employee was taken as dependent variable and employee engagement was taken as independent variable. Result of hierarchical regression outcome as presented in the above table indicates that HPHRMP has significant impact (**Beta (β) =.892, p=.000**) on in role and extra role behavior of employee. R² Value (0.197) of research model indicates independent variables are moderately contributing towards change in dependent variable. In the second step regression analysis was carried out between HPHRMP and employee engagement. Outcome indicates that HPHRMP has significant impact (**Beta (β) =.890, p=.000**) on engagement of employees. R² Value (0.310) of research model indicates independent variables are significantly contributing towards change in dependent variable(Employee engagement) in the third step, regression analysis has been carried out to check the impact of employee engagement on in role and extra role behavior of employees. Outcome indicates that employee engagement has significant impact (**Beta (β)=.841, p=.000**) on engagement of employees. R² Value (0.449) of research model indicates independent variables are significantly contributing towards change in dependent variable (in role and extra role behavior of employee).

Mediating role of employee engagement in the relationship between High Performing Human Resource Management Practices on in role and extra role behavior of employees

Human Resource Management Practices on Role and Extra Role Conduct of Employees Assessing the mediating impact of employee engagement on the relationship between High Performing Human Resource Management Practices on Role and Extra Role Conduct of Employees Indirect Effects was assessed by measuring the regression effect of HPHRMP on the role and extra role conduct of employees and further effect of employee engagement on in role and extra role behavior. The impact of HPHRMP on in role and extra role behavior of employee with beta =0.892 (f= 76.030, p=.000, t=8.719,p=.000) was found to be significant. It has contributed 19.7% (R²=0.197) variance to in role and extra role behavior of employee.

Similarly impact of HPHRMP on employee engagement ($f= 138.643$, $p=.000$, $t=11.775$, $p=.000$) was also found significant. Analyzing the effect of employee engagement on in role and extra role behavior of employee, it is observed that beta value ($\beta=0.841$,) and ($f=251.458$ $p=.000$, $t= 15.858$, $p=.000$). Significant improvement in the R^2 (from .197 to .310 to .449) indicates the mediating effect of employee engagement between the HPHRMP and in role and Extra role behavior of employee.

Further, Sobel test was carried out to analyze the influence of mediating variable. Outcome is presented in the table below

Table 6: Influence of Mediating Variable using Sobel Test (A)

.	Input		Test Statistics	Standard Error	P-Value
A	.890	Sobel test	9.42241524	0.07943717	.000
B	.841	Aroian test	9.41032522	0.07953923	.000
Sa	.076	Goodman test	9.43455198	0.07933498	.000
Sb	.053				

Table 7: Influence of Mediating Variable using Sobel Test (B)

	Input			
t_a	11.775	Sobel test	9.4538007	.000
t_b	15.858	Aroian test	9.44170763	.000
		Goodman test	9.46594037	.000

Where,

a = raw (unstandardized) regression coefficient for the association between IV and mediator.

s_a = standard error of a .

b = raw coefficient for the association between the mediator and the DV (when the IV is also a predictor of the DV).

s_b = standard error of b .

Sobel test, Aroian test and Goodman test were conducted to evaluate the effect of the mediating variable (employee engagement) of a specific independent variable (High Performing Human Resource Management Practices) on a specific dependent variable (In Role and Extra Role Conduct). In general the case of mediation can be said to be if (1) the IV has a significant effect on the mediator; (2) the IV has a substantial effect on the DV in the absence of the mediator; (3) the mediator has a large special influence on the DV. Those criteria can be used to assess whether mediation takes place informally or not, while the statistically-based methods for standardized study mediation have been used by Mac Kinnon & Dwyer (1993) and MacKinnon, Warsi & Dwyer (1995). Sobel test revealed that p-values are less than.05, indicating that the two-size z-test is greater than 1.96, and therefore the null hypothesis is dismissed and supports the alternative hypothesis that employee engagement mediates the relationship between HPHRMP and the position and extra role actions of employees.

Discussion and Conclusion

The aim of this study was to identify high-performance human resource management practices that influence the in role and extra role behavior of employees and whether employee engagement plays a mediating and moderating role in the relationship between HPHRM practices and the role and extra role behavior of employees. The proposed model has been partly verified. The findings support the evidence for the partial mediation processes stated in the proposed model and showed that High performing HRM activities had a direct impact on the in role and extra role behavior of employees. This means that the position and extra role behavior of workers can be improved by modifying HPHRM activities. This research relates to the theory of social exchange. High Performance Human resource management practices have been studied and can be used as tools for social exchange. The purpose of this research was to measure the success of High Performing Human Resource Management Practice (HPHRMP). To this purpose, the HPHRMP performance assessment model was developed based on studies of Kooij and Boon's (2018), Kehoe and Wright (2013), which reflects the multidimensional nature of HPHRM success. Results show that, out of a variety of HPHRM practices such as Recruitment and Selection, Employee Involvement, Employee Training and Development, Workplace Environment, Competency Based Performance and Compensation and Rewards Strategies, employee have rated Compensation and Rewards Highest Practices ($m=3.1936$ and $SD=.74744$) followed. The findings are also consistent with previous research by Alfes et al. (2013, Wu & Chaturvedi, 2009, Chuang & Liao, 2010; Lepak & Snell, 2002; Sun

et al., 2007). These authors identified six items involving staffing, staff training developmental performance management, motivational compensation flexible works design and participative decision making. Apart from this observation, the effect of HPHRM activities on position and extra role job conduct has been shown to be partly mediated by employee engagement. Similar finding was also confirmed by Md. Shamsul Arefin, Md. Shariful Alam, Md. Rakibul Islam & Munmun Rahaman Uchitha Jayawickrama (2019) Hey, Shariful Alam, Md. who have described high-performance work structures and psychological empowerment as having a positive impact on employment participation. The results of the study showed that the effect of high-performance working environments on jobs was mediated by psychological empowerment. Studies also show that organizational human resource systems have an impact through psychological influence on job participation. Conclusion of the mediating impact of employee engagement on the relation between high-performance work systems and affective involvement were found in support of the previous research by Ang et al. (2013). A factor that reflected the correlation between practices in HRM and personal conduct was identified by Alfes et al. (2013). This study shows that workers who have a positive perception of HRM activities are likely to engage more actively in their jobs (Alfes et al., 2013). Conway et al. (2015) have recently found that employee voice systems can be a tool to improve engagement and lower harmful efficiency.

Implications for theory and practice

Most of the business organization place greater emphasis on human resources management practices throughout the competitive business landscape today as a means to generate meaningful results for both employees and the corporation. The effect of HRM activities on employee performance variables is considerable, as scientists have pointed out (Alfes et al., 2013). The role of employee working in shifts and productive results and positive psychological resources has gained more significance. This study suggests that the use of this method of HR technology to improve employee engagement can improve individual performance. According to our findings, it is very critical to develop and maintain a working environment that supports tools such as expertise, promotion and opportunities for human resources, and a healthy working climate. Enhancing skills, enhancing morale, improving HR practices and good working conditions increases employee participation by psychological resources. In applying these human resources strategies, organizations may recruit more devoted people with higher productivity, engagement, satisfaction with life and lower sales expectations. Furthermore, it is necessary to examine in future research the moderating role of psychological capital in HR work-related practice relations in other samples. Person-Safe working conditions, the organization's profitability and the stressful working conditions may affect such connections. For further research purposes, it should be considered as well.

Limitations and future research

The current study has some limitations that must be discussed. The findings come first of all from a cross-sectional study of the architecture. Therefore, no final conclusions about the causal relationship can be drawn. Such tests should be complemented with a variety of methods that can make the finding more relevant. Longitudinal research designs for the analysis of the proposed model are necessary to achieve a more proper causality. The second drawback is that all data are self-reporting based and that is why the findings of the standard method of variance can be skewed. While statistical analysis found that there was no major concern about the variance of a particular method, the findings can be affected by the possible effects of variance in the standard method. In order to avoid such a problem, future studies will collect data from multiple sources. Finally, only a small and well known group can submit the analysis. Relevance can be increased by drawing the finding based on broader population.

References

- Albrecht, S. (2012), "The influence of job, team and organizational level resources on employee well-being, engagement, commitment and extra-role performance: Test of a model", *International Journal of Manpower*, Vol. 33 No. 7, pp. 840-853. <https://doi.org/10.1108/01437721211268357>
- Alfes, K., Shantz, A. D., Truss, C., & Soane, E. C. (2013). The link between perceived human resource management practices, engagement and employee behaviour: a moderated mediation model. *The international journal of human resource management*, 24(2), 330- 351
- Al-Hawary, S.I.S (2015). Human Resource Management Practices as a Success Factor of Knowledge Management Implementation at Health Care Sector in Jordan. *International Journal of Business and Social Science*. 6(11), 83-98

- Amabile, T. M., Schatzel Elizabeth A., Moneta Giovanni B., & Kramer, Steven J. (2004). Leader behaviors and the work environment for creativity: Perceived leader support. *The Leadership Quarterly*, 15, 5-32. <http://dx.doi.org/10.1016/j.leaqua.2003.12.003>
- Ang, S. H., Bartram, T., McNeil, N., Leggat, S. G., & Stanton, P. (2013). The effects of highperformance work systems on hospital employees' work attitudes and intention to leave: a multi-level and occupational group analysis. *The International Journal of Human Resource Management*, 24(16), 3086-3114.
- Appelbaum, E., Bailey, T., Berg, P. & Kalleberg, A. (2000). *Manufacturing advantage: Why high performance work systems pay off*. New York: Cornell University Press.
- Ayesha Noor (2009). Examining organizational citizenship behavior as the outcome of Organizational commitment: a study of universities teachers of Pakistan. *Proceedings 2nd CBRC, Lahore, Pakistan* November 14, 2009
- Bailey, C., Madden, A., Alfes, K., Fletcher, L. (2017), The meaning, antecedents and outcomes of employee engagement: A narrative synthesis, *International Journal of Management Reviews*, Vol. 19, No. 1, pp. 31–53
- Barney, J.B. and Wright, P.M. (1998) 'On Becoming a Strategic Partner: The Role of Human Resources in Gaining Competitive Advantage', *Human Resource Management*, 37: 31–46
- Blau P. M. (1964). *Exchange and power in social life*. New York: Wiley. Brief, A. P., & Motowidlo, S. J. (1986). Prosocial organizational behaviors. *Academy of Management Review*, 1986(11), 710-725.
- Blau, P. M. 1964. *Exchange and power in social life*. New York: John Wiley
- Chen, Z. X., & Francesco, A. M. (2003). The relationship between the three components of commitment and employee performance in China. *Journal of Vocational Behavior*, 62(3), 490-510. [http://dx.doi.org/10.1016/S0001-8791\(02\)00064-7](http://dx.doi.org/10.1016/S0001-8791(02)00064-7)
- Chiang, C. F., & Hsieh, T. S. (2012). The impacts of perceived organizational support and psychological empowerment on job performance: The mediating effects of organizational citizenship behavior. *International journal of hospitality management*, 31(1), 180-190
- Chuang, C. H., & Liao, H. U. I. (2010). Strategic human resource management in service context: Taking care of business by taking care of employees and customers. *Personnel Psychology*, 63(1), 153–196. doi:10.1111/j.1744-6570.2009.01165.x
- Combs, J., Liu, Y., Hall, A. and Ketchen, D. (2006). How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel psychology*, 59(3), 501-528.
- Conway, E., Fu, N., Monks, K., Alfes, K., & Bailey, C. (2015). Demands or Resources? The Relationship Between HR Practices, Employee Engagement, and Emotional Exhaustion Within a Hybrid Model of Employment Relations. *Human Resource Management*,
- Coyle-Shapiro, J. A. M., & Neuman, J. H. (2004). The Psychological Contract and Individual Differences: the Role of Exchange and Creditor Ideologies. *Journal of Vocational Behavior*, 64, 150-164. [http://dx.doi.org/10.1016/S0001-8791\(03\)00031-9](http://dx.doi.org/10.1016/S0001-8791(03)00031-9)
- Daspit, J., Madison, K., Barnett, T., and Long, R. (2018). The emergence of bifurcation bias from unbalanced families: Examining HR practices in the family firm using circumplex theory. *Human Resource Management Review*, 28(1), 18-32
- Earley. (1993). East meets West meets Mideast: Further explorations of collectivistic and individualistic work groups. *Academy of Management Journal*, 319-348. <http://dx.doi.org/10.2307/256525>
- Eisenberger, R., Jones, J. R., Stinglhamber, F., & Shanock, L. (2003). Flow experiences at work: for high need achievers alone? *Journal of Organizational Behavior*, 26, 755-775. <http://dx.doi.org/10.1002/job.337>
- Garber, P.R. (2012). *The Manager's Employee Engagement Toolbox*
- Gittel, J., (2001). Organizing work to support relational coordination. *International Journal of Human Resource Management*, 11(3), 517-539
- Glaister, A., Karacay, G., Demirbag, M. and Tatoglu, E. (2018). HRM and performance: The role of talent management as a transmission mechanism in an emerging market context. *Human Resource Management Journal*, 28(1), 148-166.
- Glaister, A., Karacay, G., Demirbag, M. and Tatoglu, E. (2018). HRM and performance: The role of talent management as a transmission mechanism in an emerging market context. *Human Resource Management Journal*, 28(1), 148-166.
- Gloud William(2007) HR Practices, Organizational Climate and Employee Outcomes: Evaluating Social Exchange Relationships in Local Government, *The International Journal of Human Resource Management* 18(9) DOI: 10.1080/09585190701570700

- Greenwich, CT: Information Age. Hui C, Law K. S., & Chen Z. X. (1999). A Structural Equation Model of the Effects of Negative Affectivity, Leader-Member Exchange and Perceived Job Mobility on In-Role and Extra-Role Performance: A Chinese Case. *Organizational Behavior and Human Decision Processes*. <http://dx.doi.org/10.1006/obhd.1998.2812>
- Griffin, M., Neal, A. and Parker, S. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of management journal*, 50(2), 327-347.
- Hackett, R. D., Farh, J., Song, L.J., & Lapoerre, L. (2003). LMX and Organizational Citizenship Behavior: Examining the Links within and Across Western and Chinese Samples. In G. B. Graen (Ed.), *Dealing with diversity* (219-264).
- Halbesleben Anthony R. Wheeler(2008} The relative roles of engagement and embeddedness in predicting job performance and intention to leave, *Work and Stress* 22(3):242-256 DOI, [10.1080/02678370802383962](https://doi.org/10.1080/02678370802383962)
- Huselid, M.A. (1995) The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance. *Academy of Management Journal*, 38, 635-672. <http://dx.doi.org/10.2307/256741>
- Icek Ajzen, & Martin Fishbein. (1977). Attitude-Behavior Relation: A Theoretical Analysis and Review of Empirical Research. *Psychological Bulletin*, 84, 888-918. <http://dx.doi.org/10.1037/0033-2909.84.5.888>
- Individual Differences in Megative Reciprocity Norm Endorsement. *Society for Personality and Social Psychology*, 30, 787-799. <http://dx.doi.org/10.1177/0146167204264047>
- Julian Seymour Gould-Williams(2007) HR Practices, Organizational Climate and Employee Outcomes: Evaluating Social Exchange Relationships in Local Government, *The International Journal of Human Resource Management* 18(9), DOI: 10.1080/09585190701570700
- Kehoe, R. and Wright, P. (2013). The impact of highperformance human resource practices on employees' attitudes and behaviors. *Journal of management*, 39(2), 366-391.
- Kim, M.S., Koo, D.W. (2017), Linking LMX, engagement, innovative behavior, and job performance in hotel employees, *International Journal of Contemporary Hospitality Management*, Vol. 29, No. 12, pp. 3044–3062.
- Kooij D, Boon C (2018) Perceptions of HR practices, person–organization fit, and affective commitment: The moderating role of career stage. *Human Resource Management Journal* 28 (1): 61-75. <https://doi.org/10.1111/1748-8583.12164>
- Kooij, D., Guest, D., Clinton, M., Knight, T., Jansen, P. and Dijkers, J. (2013). How the impact of HR practices on employee well-being and performance changes with age. *Human Resource Management Journal*, 23(1), 18-35
- Lenunink, J., & Mattsson, J. (2002). Employee Behavior, Feelings of Warmth and Customer Perception in Service Encounters. *International Journal of Retail & Distribution Management*, 30, 15-33.
- Lepak, D. P., & Snell, S. A. (2002). Examining the human resource architecture: The relationships among human capital, employment, and human resource configurations. *Journal of Management*, 28(4), 517–543. doi:10.1177/014920630202800403
- Lynda Jiwen Song, Anne S. Tsui, & Kenneth S. Law. (2009). Unpacking Employee Responses to Organizational Exchange Mechanisms: The Role of Social and Economic Exchange Perception? *Journal of Management*, 35, 56-93. <http://dx.doi.org/10.1177/0149206308321544>
- Macey, W. H., & Schneider, B. (2006). Employee experiences and customer satisfaction: Toward a framework for survey design with a focus on service climate. In A. I. Kraut (Ed.), *Getting action from organizational surveys* (pp. 53–75). San Francisco: Jossey-Bas
- Mary, A. Konoosky, & Douglas, S., Pugh. (1994). Citizenship Behavior and Social Exchange. *Academic of Management Journal*, 37(3), 656-669. <http://dx.doi.org/10.2307/256704>
- Md. Shamsul Arefin, Md. Shariful Alam, Md. Rakibul Islam & Munmun Rahaman | Uchitha Jayawickrama (Reviewing editor) (2019) High-performance work systems and job engagement: The mediating role of psychological empowerment, *Cogent Business & Management*, 6:1, DOI: [10.1080/23311975.2019.1664204](https://doi.org/10.1080/23311975.2019.1664204)
- Nadeem, K., Riaz, A. & Danish, R.Q. Influence of high-performance work system on employee service performance and OCB: the mediating role of resilience. *J Glob Entrepr Res* 9, 13 (2019) doi:10.1186/s40497-018-0142-2
- Noor, A. (2009). Examining OCBS as the outcome of organizational commitment: A study of universities teachers of Pakistan. *Proceedings 2nd CBRC*. Lahore, Pakistan. November 14.
- Paré, G., & Tremblay, M. (2007). The influence of high-involvement human resources practices, procedural justice, organizational commitment, and citizenship behaviors on information technology

professionals' turnover intentions. *Group & Organization Management*, 32(3), 326–357. <https://doi.org/10.1177/1059601106286875>

- Robert Eisenberger, Patrick Lynch, Justin Aselage, & Stephanie Rohdieck. (2004). Who Takes the most Revenge? www.sciedu.ca/ijba International Journal of Business Administration Vol. 4, No. 1; 2013 Published by Sciedu Press 27 ISSN 1923-4007 E-ISSN 1923-4015
- Salanova M, Susana Llorens GumbauEva,& CifreEva CifreIsabel (2011), We Need a Hero! Toward a Validation of the Healthy and Resilient Organization (HERO) Model, *Group & Organization Management* 37(6):785-822, DOI: 10.1177/1059601112470405
- Schaufeli, W.B., Salanova, M., Gonzalez-Roma V., Bakker, A.B. (2002), The measurement of engagement and burnout: A two sample confirmatory factor analytic approach, *Journal of Happiness Studies*, Vol. 3, No. 1, pp. 71–92.
- Schnake, M. E., & Dumier, M. P. (2003). Levels of measurement and analysis issues in organizational citizenship behavior research. *Journal of Occupational and Organizational Psychology*, 76, 283-301. <http://dx.doi.org/10.1348/096317903769647184>
- Smith, C.A., Organ, D.W., & Near, J.P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, 68, 653-663. <http://dx.doi.org/10.1037/0021-9010.68.4.653>
- Somech, A. (2006). The effects of leadership style and team process on performance and innovation in functionally heterogeneous teams. *Journal of management*, 32(1), 132-157.
- Turnley, W. and Feldman, D. (2000). Re-examining the effects of psychological contract violations: Unmet expectations and job dissatisfaction as mediators. *Journal of organizational behavior*, 21, 25-42.
- Walter C. Borman, Louis A. Penner, Tammy D. Allen, & Stephan J. Motowidlo. (2001). Personality Predictors of Citizenship Performance. *International Journal of Selection and Assessment*, 9(1), 52-69. <http://dx.doi.org/10.1111/1468-2389.00163>
- Wexley, K. N., & Yukl, G. C. (1977). *Organization Behavior and Personnel Psychology*. Homewood, IL: Richard D, Irwin, 109.
- Wright, P. M., Garden, T. M. and Moynihan, L. M. (2003). The impact of HR practices on the performance of business units, *Human Resource Management Journal*, 13(3), 21-36
- Wu, P. C., & Chaturvedi, S. (2009). The role of procedural justice and power distance in the relationship between high-performance work systems and employee attitudes: A multilevel perspective. *Journal of Management*