Article

A Structural Equation Model for Measuring the Impact of Human Resource Management Practices and Organizational Loyalty on Employee Retention: An Indian Perspective

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Abstract: The role of human resource management practices and organizational loyalty dealing with employee retention has been widely explored and examined in the existing literature. The majority of human resource management researchers have focused on the role of policies and practices in different sectors related to employee retention. However, less attention has been given to identifying the practices and procedures common across all industries and sectors. The present study attempts to determine and examine the most important constructs like HR practices and organizational loyalty of employee retention management and proposes a comprehensive structural equation model to measure the impact of these constructs on employee retention. After an extensive review of the literature, organizational loyalty, and human resources management practices like recruitment and selection, compensation and benefit, training and development, supervision and evaluation have been identified as four essential practices dealing with employee retention and are common across all industries. These practices constitute the component factors of an employee retention management predicting employee's turnover intentions. The survey method was adopted, and the original data obtained through the self-administered questionnaire. The valid one hundred and eighty-nine (189) respondents analyzed by using Lisrel 8.7, Structural equation model (SEM) analysis results shows that human resource management practices and organizational loyalty have strong positive impact on employee retention. This study tends to assist human resource managers and decision makers in selecting the appropriate motivating factors to retain and satisfy their employees

Keywords: Organizational loyalty, human resource management practices, structural equation
 modeling, employee turnover and employee retention

1. Introduction

- 39 There is a significant problem of turnover in any of the organization. It is a misperception that
- 40 all turnovers are awful, and that must evade. But actually if an organization does not have a
- 41 balanced level of turnover, it will result in the monotonous system, and that organization will
- 42 not have access to new ideas, change dynamism and creativity. Turnover influences
- 43 profitability and customer satisfaction (Koys, 2001). Our concern is that the required

44 turnover must exist, but the unwanted voluntary turnover should be reduced or avoided. In 45 today's competitive environment employees leave their organization for various reasons. As 46 the knowledge of employees have become highly critical in gaining competitive advantage in 47 today's business climate (Hall, 1993). The organizations are trying to retain the best 48 employees. The Importance of human resource management practices and organizational 49 loyalty and their retention is recognized. Initially, because resources are scarce and secondly 50 because the competition by businesses to have the best and most talented employees for their 51 organization (Chambers et al., 1998) and finally because Turnover also destroys the 52 customer confidence in the company (Koys, 2001). Customers don't want to teach about 53 their needs to the new employees. So it is better to retain employees that can keep customers. 54 In the competitive environment, the retention of skilled employees is terrible. Top 55 management & HR department put in an extensive time, financial resources and effort to find 56 out the way to retain their employees and gain competitive advantage (Bartlett & Ghoshal, 57 2013). Training efforts are also use to maintain employees (Chen, 2014). 58 The research in this area is segmented, and either one or few variables have been understudy 59 e.g. one researcher worked on the impact of human resource management training on 60 retention, and the other investigator worked on how promotion, awards, and supervision 61 significance's employee retention. Work has done on the organizational citizenship 62 behavior; that leads to retention. Career opportunities, work-life policies, job characteristics, 63 etc. however, no work of literature has tried to integrate and consolidate the various factors that have been studied empirically in a single body of work. This paper incorporates all this 64 65 segmented work into an integrated conceptual model which will help organizations to take 66 care of all factors that influence employee retention instead of one or two of them. Next in 67 this paper, the literature review of all variables mentioned above is discussed in detail 68 followed by the conceptual model. Finally, you will see the conclusion section in which 69 suggestions are given for organizations to retain the employee. Impending research 70 directions also proposed in the paper.

2. Research Gap Addressed

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This study aimed to rectify the gap in the existing literature and provide valuable insights that
may clarify the differences in HRM practices and the importance of organizational loyalty
that affect employee retention and also check the mediation role of organizational loyalty
between hr practices and employee retention. Therefore the study captures all essential
information and more amenable to estimation and discussion. As a result, the retention
approach considered the most efficient research design to effectively explore the broad
objectives of the study

3. Literature Review:

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Taylor (2002) introduces two perspectives on retention. The first one states that reducing the employee turnover rate is desirable for all organizations and that the fact it should be the aim of initiatives in the employee retention. It also suggests that improving retention /turnover rates in general is or should be a central objective of human resource management policy. According to this perspective, high levels of turnover are often seen as evidence of failing in human resource functions. The author also introduces another perspective on the matter: after a "new world of work" has emerged, the retention rates have raised because of the flexibility of labor market. It said that this is desirable, and the organizations should focus their efforts on the retention of the most outstanding performers, those few people in each section who can make a difference in the business. After this, the author states his perspective, that even though he thinks that both of the perspectives are right in their way, in his opinion the employee turnover is always damaging the organization, and none of the employees should be as no important. According to him, most of the employees at different levels of organizations are so called average workers, but they, in fact, ensure that the show goes on and take care of the fundamental objectives of the organization leaving room for the excellent performers to shine. This researcher reminds that there is a cost in every "departure" of even the below average performers of Taylor's (2002), The Three Rs of Employee Retention. Hausknecht et al., 2009, listed 12 most important retention factors that have published in the journals over the last 60 years which helped in explaining employee retention.

100 Employee retention consists of 3 R's which helps in retaining valuable employees. To keep 101 such employees and maintain high in satisfaction, you have to implement each of the three Rs 102 of employee retention. The three R's are; Respect, Recognition, and Rewards 103 Respect is value, particular consideration or special regard given to employees. The first R. 104 respect is the foundation of maintaining your employees. Recognition and rewards will have 105 modest effect if you don't recognize your employees. 106 Recognition is referred as "special observe or attention" and "the act of perceiving clearly." 107 various problems with retention and confidence occur because management is not paving 108 attention to employee's needs and reactions. 109 Rewards are the extra perks that a company offers beyond the basics of respect and 110 recognition that makes it worth employee's while to work hard and to take care of their job. 111 3.1 Human Resource Management Factors Influencing Employee Retention 112 There are rising facts that HRM can play a significant role in retaining skilled professional at 113 any organization. Researchers of progressive HRM practices in training and development, 114 supervision, and evaluation, recruitment and selection, compensation and benefits have 115 revealed that these can lead to reducing employee turnover and absenteeism (Arthur1994; 116 Huselid M,A. 1995 and Delaney and Huselid 1996). According to Fitz-enz (1990), 117 managing retention of employees is influenced by many factors, which should lead 118 congruently; recruitment and selection, compensation and benefits, training and development 119 and employee support programs. Similarly, Compensation affects the recruitment and 120 retention of employees and therefore playing an important role in managing people (Rynes 121 and Barber 1990; Williams and Dreher 1992 Highhouse.et al., 1999; Parker and Wright 122 2001). In 2003, there was a study conducted by Mercer; he stated that employees remain 123 with the present organization if they rewarded. Usually, workers are paid when they 124 performed better in their work, and they perform better due to their loyalty towards the 125 organization. Employees tend to remain with the current team when they feel their efforts and 126 performance, abilities contributed are renowned and valued by the organization (Davies, R 127 2001). There are also studies that have highlighted the rewarding practices of workers will 128 help the organization in retaining employees (Watson Wyatt1999, Mercer 2003; Tower

- Perrin 2003). In today's organization finding to get the more skilled employees, the more
- likely they are to remain. Indeed, when the training ends, the turnover tends to begin (Jamrog
- 131 2002; Wien-Tuers and Hill 2002).

132 3.2 Organizational Loyalty Influences Employee Retention

- Loyalty, as a general term signifies a person's devotion or sentiment of attachment to the
- organization. Workers who felt that the organization failed to treat them challenging and
- interesting work, opportunities to develop their skills and autonomy were more likely
- negatively and lacked loyalty towards the organization and greater level of intention to quit
- the job (Phillips 1997). The loyalty of employee can be determined through direct
- questioning no one can assume whether employees today work efficiently (Angle, 1983).
- (Streers, 1977) believes that organizational loyalty is the strength of the competition (link)
- between the individual with his organization and his association with it. (Allen & Meyer,
- 141 1990) showed that loyalty is a psychological condition reflects the relationship of the person
- in the organization in which it operates by Porter, et al., 1979 and also identified the loyalty
- as the strength of correlation of the individual with its organization, and that the person who
- shows a high level of organizational loyalty in the organization. In which it operates it has a
- strong belief to accept the goals and values of the organization, ready to make every possible
- effort to serve the organization, and has a strong desire to continue working in such
- 147 organization

148 The following research objectives were developed to guide the study

- 150 1. Is there a relationship between human resource management practices and employee
- 151 retention?

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- 152 2. Is there a relationship between organizational loyalty and employee retention?
- 153 3. Does organizational loyalty acts as a mediator between human resource management
- practices and employee retention?

1. Hypotheses of the study:

- 156 H1: There is a relationship between human resource management practices and
- organizational loyalty on employee retention

H2: Organizational loyalty mediates the relation between human resources management practices and employee retention

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2. Research Model/Theoretical framework of the study

This study assessed organizational loyalty and human resource practices and how it helps retaining employees in health care sectors.

164 As shown in figure 1, organizational loyalty and human resource management practices are

the observed variables under the independent construct.

Based on the above hypotheses, the theoretical framework has been framed in figure 1 and

167 figure2.

168 The independent variables in this study are human resource management practices and

organizational loyalty, and the dependent variable is employee retention.

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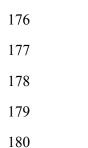
Figure 1: shows the independent variables that influence the dependent variable.

Figure 2: shows the mediation effect of loyalty between HRM practices and employee

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HRM practices



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Figure 1: Theoretical framework of the study

Organizational

loyalty

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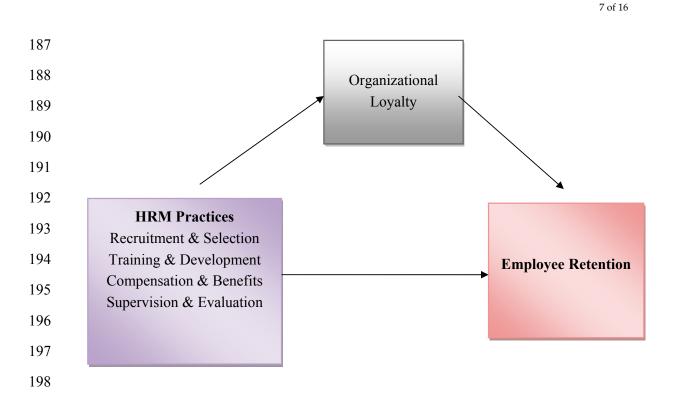


Figure 2: Mediation Model of the study

3. Methodology

The research method involved a survey method. The questionnaires were developed based on literature studies. Convenience and snowball sampling method were used to conduct the study and carried out in each organization, with about 70-100 employees. The questionnaire distributed to 350 workers, with 189 returned. This 57 percent responded rate was deemed acceptable (Comrey and Lee 1992). They were given two weeks time to finish the survey. We got weak responses from some organization.

4. Data Collection and Sample population

SPSS Version 20 (Statistical package for social sciences) and Lisrel 8.7 were used to analyze the quantitative data. All items were coded from 1-5 using Likert 5 point scale (Strongly Agree to Strongly Disagree). The statistical analysis includes reliability, EFA (exploratory factor analysis) and Structural equation modeling (CFA) using Lisrel 8.7

The population sample used in this study consisted of health care professionals from Tamil Nadu and Andhra Pradesh. The participating organization was from hospital sectors, manufacturing sectors and also included industry sectors.

5. Measurement

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Multiple items adopted and modified from various studies have been used to measure the employee retention and the constructs of this study. Human resource management practices and organizational loyalty, employee retention have been measured with 14 and 21 items each by following Nelson McCann(2010), Fischer (2011) and Spreitzer (1995) where all the elements have acceptable and reliability above the acceptance level. i.e., human resource management practices (0.88), organizational loyalty (0.89) and employee retention (0.72).

6. Data Analysis

We present in the following the results of reliability analysis (spss), linear regression (spss), hierarchical linear modeling (spss) and confirmatory factor analysis model (Lisrel-8.7) and additional analyses.

6.1 Reliability of the Instruments

An alpha of 0.70 or above is considered to be reliable as suggested by many researchers (Nunnally 1978 and Davis 1996). It is seen from the below table that all constructs in the study have reliability above the suggested alpha value.

Constructs	Cronbach's alpha
	(obtained for the study)
People Management Practices	0.89
(4 Constructs-21 items)	
Organizational Loyalty	0.90
(21 items)	
Employee Retention	0.84
(14 items)	

Table 1: Reliability of the Instruments

235 Regression analysis of human resource management practices on employee retention Model Summary

	Model	R	R Square	Adjusted R	Std. Error of the
				Square	Estimate
Ì	1	.795ª	.632	.630	5.62917

a. Predictors: (Constant), HRM

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Coefficients^a

Model		Unstandardized Coefficients		Standardized	t	Sig.
				Coefficients		
		В	Std. Error	Beta		
1	(Constant)	12.436	1.789		6.951	.000
[HRM	.513	.029	.795	17.907	.000

a. Dependent Variable: ER

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238 Regression analysis of organizational loyalty on employee retention

Model Summary

Model	R	R Square	Adjusted R	Std. Error of the
			Square	Estimate
1	.714ª	.510	.507	6.49373

a. Predictors: (Constant), OL

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Coefficientsa

Model		Unstandardize	ed Coefficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	14.485	2.142		6.762	.000
1	OL	.450	.032	.714	13.945	.000

a. Dependent Variable: ER

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Hypothesis1: There is a positive significant impact of HRM practices and organizational loyalty on employee retention.

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6.3 Hierarchical Regression Analysis for Mediation analysis

Hierarchical Regression analysis of HRM practices, organizational loyalty on employee retention

Model Summary

Model	R	R Square	Adjusted R	Std. Error of the
			Square	Estimate
1	.795ª	.632	.630	5.62917

ĺ	2	007h	650	640	5.48701
	2	.807 ^b	.652	.648	5.48701

a. Predictors: (Constant), PMP

b. Predictors: (Constant), PMP, OL

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Coefficients^a

Model		Unstandardized Coefficients		Standardized	t	Sig.
				Coefficients		
		В	Std. Error	Beta		
1	(Constant)	12.436	1.789		6.951	.000
'	HRM	.513	.029	.795	17.907	.000
	(Constant)	10.152	1.877		5.408	.000
2	HRM	.396	.045	.613	8.713	.420
	OL	.146	.044	.231	3.289	.001

a. Dependent Variable: ER

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Hypothesis 2: organizational loyalty mediates the relation between HRM Practices and employee retention.

The first hypothesis of the study was that HRM practices and organizational loyalty influence the employee retention. According to the table of regression, Analysis p-values show the significant relationship between the HRM practices and organizational loyalty and employee retention. Hence, hypothesis stood true. The R-square values of 63% and 50% are the variance of employee retention that is explained by the constructs.

The second hypothesis stated that organizational loyalty positively influences the HRM practices and employee retention.

According to the table of regression Analysis p-values shows the significant relationship between the HRM practices and employee retention in the enter method when we added the second construct that is mediating variable (organizational loyalty) the significance value of HRM practices that becomes non-significant, which proving the hypothesis correct. The impact of the organizational loyalty as per Beta value, i.e., 0.146 on Employee Retention is found almost 66%.

6.3.1 Mediation Analysis

Mediation analysis has been used to see the impact of independent variable (human resource management practices) on dependent variable (employee retention) in the presence of 11 of 16

mediating variable (organizational loyalty). The method suggested by Baron and Kenny (1986) has been used to find out the effect of the mediating variable. These results show that organizational loyalty fully mediated the relationship between HRM practices and employee retention. All steps are used as described by Baron and Kenny (1986) and Judd and Kenny (1981).

7. Structural Equation Modeling

SEM-Confirmatory factor analysis Human resource management practices, organizational loyalty, and Employee retention

From the below figures it can be seen that all the items that have fallen under respective constructs and also having the value of above .4 and the table shows the GFI, NFI, NNFI, RMSEA and all the values are met acceptable fit indices as suggested by Joreskog and Sorbom (1984). Confirmatory Factor Analysis (CFA) is a type of analysis in contrast with Exploratory Factor Analysis (EFA). This study conducts CFA on the two independent variables and dependent variable (figure 3) and also the CFA has done for all the constructs in the study (human resource management practices and organizational loyalty) in figure 4.

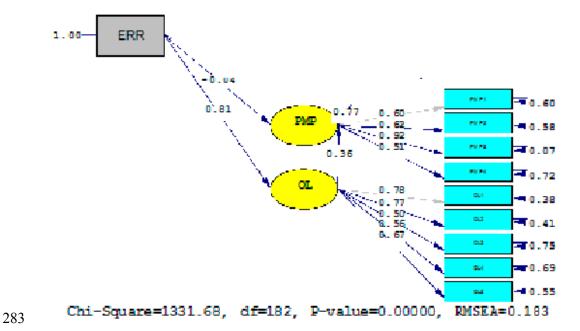


Figure 3: shows the CFA of the independent constructs and related with employee retention

in the study

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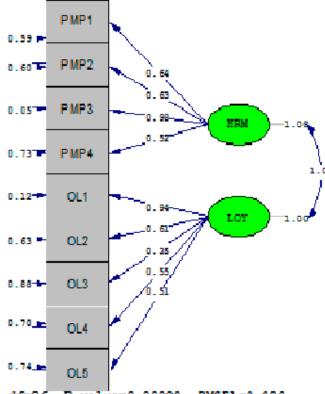
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Chi-Square=154.55, df=26, P-value=0.00000, RMSEA=0.038

Figure 4: shows the CFA of the independent constructs in the study

Overall Fit Certification After the literature review and the factor analysis on sampled data, this study constructs the overall model and, as suggested by Hair, Anderson, Tatham, , and Black (1998) classifies the measurement of the overall model fit into three categories, i.e.

measures of absolute fit, increment fit and parsimonious fit.

Constructs	Chi	NFI	CFI/TLI	GFI	NNFI	AGFI	RMSEA
	Square						
	value						
HRM	74.54	0.97	0.92	0.91	0.91	0.86	0.053
OL	69.65	0.90	0.95	0.94	0.83	0.89	0.078
ER	62.71	0.96	0.90	0.93	0.99	0.80	0.035

293 **Table 2**: shows the results of the overall fit test

8. Conclusion

13 of 16

The primary objective of this study is to identify the impact of human resource management practices and organizational loyalty on employee retention. Two hypotheses have framed in this study and they both are accepted. Results of the survey revealed that human resources management practices and organizational loyalty have a positive significant impact on employee retention. Secondly, organizational loyalty plays an important mediating role between human resource practices and retaining the employees in any organization. Organization should take responsible for recruiting people, practices, training, compensation and supervision to their employee so that they can improve their behavior and must loyalty with their organization. Both the hypotheses accepted in the study that there is a significant positive influence of human resource management practices and organizational loyalty on employee retention, and organizational loyalty plays a mediation role in human resource management and employee retention.

Recommendations for future research

It is found that organizational loyalty has a significant role in mediating human resource management practices and retaining of employees, but there needs to be an improvement in the area of Training & Development, Compensation, and benefit. To avoid such gaps, Organization must have to take care of Employees Training & Development, Compensation and benefits which create loyalty among employees. Apparently, it has to be on a normal interval which not only progresses & enhance their skills but also increases the productivity of any organization. It is also important to retain resources while offering other benefits like wellbeing, encouragement, skill development, participative approach, two-way interactions, etc.

9. References

- Allen and Meyer (1990), "The Measurement and Antecedents of Affective, Continuance and Normative Commitment to the Organization", *Journal of Occupational Psychology*, Vol. 63,1-18.
- 321 2. Angle (1983). Organizational commitment: Individual and organizational influences.
 322 Work and Occupations, 123-146

- 3. Arthur, J. (1994). Effects of human resource systems on manufacturing performance
- and Turnover. Academy of Management Journal, Vol. 37, 670-687
- 4. Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction
- in social psychological research: Conceptual, strategic, and statistical considerations.
- *Journal of Personality and Social Psychology*, 51, 1173–1182.
- 5. Bartlett, C., & Ghoshal, S. (2013). Building competitive advantage through people.
- 329 Sloan Mgmt. Rev, Vol. 43(2).
- 6. Chambers, E., Foulon, M., Handfield-Jones, H., Hankin, S., Michaels III, E., 1998.
- *The war for talent. The McKinsey Quarterly*, Vol. 3(1), 44–57.
- 7. Chen, M. (2014, January). The Effect of Training on Employee Retention. In 2014
- 333 International Conference on Global Economy, Commerce and Service Science
- 334 (GECSS-14). Atlantis Press.
- 8. Comrey & Lee (1992). A first course in factor analysis. Hillsdale, NJ: Erlbaum.
- Davies, R. (2001). How to boost staff retention. in people anagement. Vol:7(8):54-56.
- 10. Davis (1996). Business Research for Decision Making,, Fourth Edition, Belmont,
- California: Duxbury Press, 86-113,
- 339 11. Delaney, J.T. & Huselid, M.A. (1996). The impact of human resource management
- practices on perceptions of organizational performance in for profit and non profit
- organizations. Academy of Management Journal, Vol:39, 949-969
- 12. Fischer, R. (2011). Cross-cultural training effects on cultural essentialism beliefs and
- 343 cultural intelligence. International Journal of Intercultural Relations, Vol. 35,
- 344 767-775.
- 345 13. Fitz enz, J. (1990).Getting and keeping good employees. *In personnel*.Vol: 67(8):
- 346 25-29.
- 14. Hair, J. F. Jr., Anderson, R., Tatham, R., and Black, W. C. (1998). Multivariate Data
- Analysis (5th ed.). Upper Saddle River, NJ: Prentice Hall

- 15. Hall, R. (1993). "A framework linking intangible resources and capabilities to
- 350 <u>sustainable competitive advantage." Strategic management journal, Vol.</u>
- 351 <u>14(8):607-618.</u>
- 16. Hausknecht, J. P., Rodda, J., & Howard, M. J. (2009). Targeted employee retention:
- Performance-based and job-related differences in reported reasons for staying.
- Human Resource Management, Vol. 48(2), 269-88.
- 355 17. Highhouse, S, Stierwalt, S.L, Bachiochi, P, Elder, A.E and Fisher, G, (1999), Effects
- of advertised human resource management practices on attraction of African
- American applicants", Personnel Psychology, Summer, Vol:52(2),425(1).
- 18. Huselid, M. A. (1995). "The impact of human resource management practices on
- 359 turnover, productivity, and corporate financial performance", Academy of
- 360 Management Journal, Vol. 38, 635-672.
- 361 19. Jamrog, J. J. (2002) The coming decade of the employee. Human Resource Planning,
- 362 Vol: 25 (3), 5–11.
- 20. Judd, C. M., & Kenny, D. A. (1981). Process analysis: Estimating mediation in
- treatment evaluations. *Evaluation Review*, 5, 602–619.
- 365 21. Koys (2001), The Effects Of Employee Satisfaction, Organizational Citizenship
- Behavior, And Turnover On Organizational Effectiveness: A Unit-Level,
- Longitudinal Study, *International journal of personnel psychology*, vol. 54(1),
- 368 101-114.
- 369 22. Mercer Report, (2003). Mercer study raises red flags for employer pay and benefits
- plans (findings of the 2002 people at work survey). *In human resource department*
- 371 *management report*, 8-15.
- 372 23. Nelson, K., McCann, J. E., 2010. Designing for knowledge worker retention &
- organization performance. *Journal of Management and Marketing Research*, Vol:
- 374 1,1-18
- 375 24. Nunnally (1978). Psychometric Theory, McGraw-Hill Book Company, 190-255.
- 376 25. Parker, O & Wright, L, (2001), "Pay and Employee Commitment: the missing link",
- 377 Ivey Business Journal, Vol. 65(3), 70.

- 378 26. Phillips, J. J. (1997a). Handbook of training evaluation and measurement methods
- 379 (3rd edition.).Boston: Butterworth-Heinemann.
- 380 27. Porter, Steers, R., Mow day, R. & An Ban lain, P. (1979). Organizational
- Commitment, Job Satisfaction and Turnover among Psychiatric Technicians. Journal
- of Applied Psychology. Vol: 59.
- 383 28. Rynes and Barber (1990). "Applicant attraction strategies: An organizational
- perspective", Academy of Management Review, Vol. 15, 286-310
- 385 29. Spreitzer (1997) an empirical examination of a comprehensive model of
- psychological empowerment in the workplace, American Journal of community,
- 387 23(5), 601-629.
- 388 30. Steers (1977) Antecedents and consequences of organizational commitment.
- 389 *Administrative Science Quarterly*, Vol. 22, 46-56
- 390 31. Taylor, S. (2002). Occupational Pensions and Employee Retention: Debate and
- 391 Evidence. Employee Relations, Vol. 22(3), 246-259.
- 392 32. Tower Perrin, (2003). Rewards: the not so secret ingredient for managing talent.
- 393 (Retention). HR focus, Vol. 80 (1):3-10.
- 33. Watson, Wyatt. (1999). Work USA 2000: Employee commitment and the bottom
- line. Bethesda, MD: Watson Wyatt, 43-58.
- 34. Wiens-Tuers, B. & Hill, E. (2002) Do They Bother? Employer Training of
- Temporary Workers. Review of Social Economy, Vol. 60 (4), 543–566.
- 398 35. Williams and Dreher (1992), "Compensation systems attributes and applicant pool
- 399 characteristics", *Academy of Management Journal*, Vol. 4 35. 571-595.