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ORIGINAL ARTICLE

IT-expert retention through organizational commitment: A study of public sector information technology professionals in Pakistan



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Abstract Organizational commitment has been studied extensively world over and hundreds of research articles are available however a few studies address organizational commitment in IT sector high technology employees. In Pakistan insufficient research is available specific to IT sector employees. The present study is an attempt to better describe these factors which can induce organizational commitment in Pakistani IT sector high technology employees.

Previous studies in different countries validate that compensation; training and development and supervisor support induce organizational commitment in high technology employees, which increases employee retention. These factors were tested in IT sector organizations in Pakistan, findings of present study established that in Pakistan for IT professional's compensation, training and development and supervisor support is significantly correlated with organizational commitment.

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Continuance commitment; Organizational commitment questionnaire (OCQ) The findings of present research will be useful for human resource managers in IT sector organizations through out Pakistan and it will help them in retaining this scarce human capital.

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1. Introduction

Managing turn over is a increasing challenge especially for companies employing high technology professionals (Dockel, 2001). Managers have to bolster IT professionals' sense of self-worth by treating them as intellectual assets, not operating expenses, and by helping them shape and direct their careers, so they can gain experience within the enterprise rather than outside it (Paré and Tremblay, 2000).

The above findings of some researches conducted on of high technology IT professionals validate that their retention is becoming difficult for business managers and organizations are interested in finding out ways which can induce organizational commitment in IT sector high technology employees and reduce turn over. The studies conducted in this regard found significant relationships between organizational commitment and employee retention factors like compensation, training and development and supervisor support. Dockel (2001) conducted a research in this regard however this research was specific to telecom industry and South African working environment. Hence it cannot be applied globally or in any other country like Pakistan.

Pakistan is a developing country with less opportunities due to which high technology employees always try to avail a better opportunity that makes retention of high technology employees more complex and difficult job for a manager. Hence present study explains relationship of some significant factors in Pakistani public sector IT professionals, which can induce organizational commitment.

2. Review of literature

A number of articles were reviewed to study the importance of employee retention, organizational commitment with specific reference to high technology employees IT sector. The literature review clearly establishes relation ship between factors like Compensation, training and Development and Supervisor Support on Organizational Commitment.

2.1. Compensation

Compensation has a strong and significant relationship to organizational commitment (Dockel, 2001). Indeed, more an employee perceives a high level of internal equity (in comparison with other employees of the same department and/or the same company) and external equity (in comparison with individuals occupying

a similar job in other organizations) in regard to issues such as compensation and benefits, performance evaluation, promotions, and mandates, the less they will intend to leave current employer (Paré and Tremblay, 2000). Because of the high technology employees commitment to their team, group based pay may result in more commitment to organization (Dockel, 2001). Earning was found to be not significant though it is positively related to continuance commitment (Johns, 2005). Employees constantly review if their salary is still competitive (Dockel, 2001). Those in the highest ranks calculate costs and benefits, which may impact their thoughts of leaving (Moynihan et al., 2000).

In addition to above there are researches which suggest that one should not organizations should not solely rely on compensation, e.g., A retention strategy that solely focuses on compensation conditions and benefits is not likely to favor commitment and loyalty of employees and offer any guarantee in satisfaction and retention. Further, such a strategy is not likely to compensate for the lack of professional recognition and chances of advancement and for a little stimulating IT job (Paré and Tremblay, 2000). While a focus on competitive pay packages to attract and retain talented cadres is clearly effective in manifesting job motivation, complimentary strategic HR practices are profoundly important in reducing staff turnover (Chew, 2005). Commitment stemming from economic and pragmatic considerations may actually lead to poor performance and leadership (Moynihan et al., 2000). Merely increasing wages will increase individual's perception of low alternatives but has no impact on improving the alignment of employee goals with the organization (Iverson and Buttigieg, 1999).

These diverse findings highlight importance of compensation. It needs to be tested whether organizational commitment in Pakistani IT professionals can solely be induced through compensation or there are some other factors in addition to compensation. However literature review strongly establishes relationship between organizational commitment and compensation. Hence in present study Compensation is one of the independent variable and its relationship with Organizational commitment will be seen in the findings.

H1: Compensation is significantly and positively related to Organizational Commitment

2.2. Training and development

Employee development programs play a significant role in job satisfaction which helps lead to retention (Shelton, 2001). Training, development opportunities and career opportunities were not found to have direct impact of organizational commitment in high technology industry This finding is contrary to many other findings in high technology industry (Dockel, 2001). Training is too often seen as a perk when it should be seen as essential investment in the intellectual capital of

the organization. This is true in every professional field, but is perhaps more acute in IT (Paré and Tremblay, 2000). Proper training of managers and supervisors to recognize profile of each individual coupled with training in how to turn around perception that the organization controls can considerably improve retention efforts (Rossi, 2000). Organizations should have a process for encouraging, planning and investing in high technology employee's professional development (Dockel, 2001). Training, support for training and motivation to learn were significantly and positively associated with overall commitment and its types, i.e., affective commitment and normative commitment (Ahmad and Bakar, 2003).

Thus Training and Development has emerged as one of important independent variable having relationship with organizational commitment. Hence it is taken in the present research and its impact on organizational commitment in Pakistani IT professionals will be tested.

H2: Training & Development is significantly and positively related to Organizational Commitment

2.3. Supervisor support

Indeed, it seems that a successful employee whose work performance is recognized by his superiors and his peers will tend to do more than what is formally required of him (Paré and Tremblay, 2000). For high technology employees supervisor support gives them a chance to make difference on job, try out new skills and receive feed back on performance (Dockel, 2001). Employees emotional attachment to, identification with, and involvement in the organization is positively related to supervisor care and concerns about their employees, opinion, values and general well being (Soulen, 2003). The perception of the employees that the organization does support them is with strongest positive correlation with affective commitment (Mayer et al., 2002) where as supervisor relationships had a more and stronger relationship to turnover intention (Raabe and Beehr, 2003). These findings are sufficient to argue that supervisor support is strongly related with organizational commitment and due to its relationship it is one of the independent variables and its relationship with organizational commitment will be tested in Pakistani IT professionals.

H3: Supervisor Support is significantly and positively related to Organizational Commitment

But while seeing the relationship of these factors it is important to note that retention is not for every one. For example one research suggests that would be a mistake to believe that organizations should attempt to retain each and every employee-especially in today's economic turmoil. The challenges that confront mangers are therefore not only how to minimize the possibility of loosing good

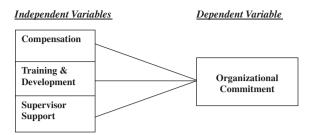


Figure 1 Theoretical framework showing relationship between independent and dependent variables.

employees, but also how to identify the employees and organization needs and wants to keep (Kreisman, 2002).

All the above literature review identified three important independent variables and all of them have relationship with the dependent variable Organizational commitment. It is the employee's emotional attachment, identification with, and involvement in a particular organization. The major contribution in defining organizational commitment and its components is by Allen and Meyer (1990) who have described three types of Organizational commitment as affective, normative and continuance. All three forms of organizational commitment are negatively correlated with withdrawl cognition, turnover intention and turn over (Mayer et al., 2002). Managers must keep in mind that IT specialists who identify themselves and feel emotionally attached to their organization and/or work unit are those who risk least to leave (Paré and Tremblay, 2000). Organizational commitment was revealed to be negatively related to turnover intentions (Lee, 2000). Affective commitment constitutes the primary predictor of turnover intentions. IT specialists grant a lot of importance for the alignment between their own values and those conveyed by management and they look for a work environment or milieu which will allow them to develop a strong feeling of belonging (Paré and Tremblay, 2000). Job involvement, Organizational commitment are negatively related to turn over intention (Sjoberg and Sverke, 2000). Organizations that focus on different retention strategies that tap into different mind sets of commitment might have a better chance of retaining key employees (Irving et al., 2002). The organizational commitment has also macro level implications. Organizations with weak commitment are often less productive and if this occurs broadly throughout a number of organizations then quality of products and services may decline (Johns, 2005). Thus research on organizational commitment can also specify causes of low quality products in Pakistan (Fig. 1).

3. Methodology

3.1. Questionnaire

The questionnaire contained questions relating to organizational commitment, Compensation, Training and Development and Supervisor support. The questionnaire was based on well tested questionnaire like Allen and Myers Organizational commitment questionnaire (OCQ). Dockel (2001) used similar questionnaire to find out the Organizational Commitment in high technology employees in South Africa. The questionnaire with some modifications as per local requirements of Pakistan was used. Since the questionnaire was successfully used in previous studies and well tested by researchers on internal consistency and other measures hence in the present study the same questionnaire was used to test the level of organizational commitment in Pakistani IT sector professionals. Participants had to indicate their agreement with each item on five point Likert scales (endpoints: 1 = strongly disagree, 5 = strongly agree).

Questionnaires were printed and given to the heads of the respective human resources departments of each organization. Participation was anonymous to have an impartial opinion. The questionnaires were accompanied by a covering letter explaining the confidentiality and importance of this research.

3.2. Participants

There are a number of public sector IT organizations in Pakistan out of which nine IT organizations were selected in this study.

3.3. Statistical methods

3.3.1. Frequency tables

Tables 1–7 show the demographics of the respondents.

Table 1	Frequency: gender.	
Gender	Frequency	Percentage
Male	63	82
Female	14	18
Total	77	100

Table 2 Frequency: age.		
Age	Frequency	Percentage
20–24	3	3.8
25–29	24	31
30–34	25	32.4
35–39	10	13
40–44	7	9.6
45–49	5	6.4
50 and Over	3	3.8
Total	77	100

Table 3 Frequency: qualification.		
Qualification	Frequency	Percentage
Bachelors	17	22.5
Masters	56	72.5
MS/M.Phil.	4	5
PhD	0	0
Total	77	100

Table 4 Frequency: marital status.				
Marital status	Frequency	Percentage		
Married	49	64		
Unmarried	28	36		
Total	77	100		

Table 5 Frequency: native language	ge.	
Native language	Frequency	Percentage
Urdu	34	44.2
English	4	5.2
Punjabi	21	27.3
Sindhi	3	3.9
Pushto	6	7.8
Others	9	11.7
Total	77	100

Table 6 Frequency: organizational terr	nure.	
Organizational tenure	Frequency	Percentage
1–4	47	61.0
5–9	10	13.0
10–14	9	12.0
15–19	3	3.9
20–24	3	3.9
25–29	3	3.9
30 and above	2	2.5
Total	77	100

3.3.2. Correlation matrix

The correlation matrix measures the relationship between different variables. The matrix at Table 8 shows extent of relationship between the independent variables and the dependent variable, i.e., Organizational Commitment.

Table 7 Frequency: involvement in salary related issues.				
Involvement Frequency Percentage				
Yes	10	13		
No	67	87		
Total	77	100		

Table 8	Correlation	analysis.						
	Mean	SD	OC	Comp	T&D	SS	Age	Tenure
OC	3.13	0.409	1					
Comp	2.73	0.716	0.301**	1				
T&D	2.91	0.827	0.340**	0.364**	1			
SS	3.09	0.334	0.349**	0.406**	0.301**	1		
Age	32.9	7.44	0.105	0.043	-0.077	-0.135	1	
Tenure	6.04	7.04	0.021	-0.031	-0.147	-0.158	0.902**	1

SD = standard deviation, OC = organizational commitment, Comp = compensation, T& D = training and development, SS = supervisor support.

3.3.3. Statistical computer program

The data was processed in Statistics package SPSS.14.

4. Results

4.1. Characteristics of target population

Although these selected organizations employed thousands of employees but the professional Information Technology employees were in limited numbers. A total of 85 IT professionals were serving in these organizations and due to their limited number whole population was taken as sample. Out of these respondents 77 responded making response rate 90%. Keeping in view the limited number of IT professionals in public sector organizations the sample is sufficient for analysis of various results.

4.2. Discussion and findings

4.2.1. Discussion and findings (Table 1)

Most of the respondents were male and they constituted 82% of the total population. Being a relatively new field in Pakistan the number of female IT professionals is low in Pakistani organizations.

^{**} p < 0.01, N = 77.

4.2.2. Discussion and findings (Table 2)

Most of the respondents were young and more than 60% were between the age of 25-35 years.

4.2.3. Discussion and findings (Table 3)

The frequencies of qualification show that 77% of the respondents possess masters or higher qualification. The reason for this percentage is that only High Technology IT professionals were included in this study. This is also a reason why total sample size was 77 out of thousands of employees. Many respondents also possess professional IT certifications (not shown in this table).

4.2.4. Discussion and findings (Table 4)

Majority of respondents (64%) are married. Thus majority of the respondents have spouse and children responsibilities as well.

4.2.5. Discussion and findings (Table 5)

The findings in Table 5 indicate that 44.2% of the respondents have shown their native language as Urdu which is also the national language of Pakistan. Punjab is the biggest province of Pakistan and 27.3% respondents have shown their native language as Punjabi. Some foreign nationals are also working in these IT organizations showing their native language as English.

4.2.6. Discussion and findings (Table 6)

As already highlighted at Table 2 most of the respondents are young. Table 7 regarding tenure indicate that 61% respondents have a tenure up to four years in their respective organizations. Thus study gives a better understanding of level of organizational commitment of young IT professionals in Pakistan.

4.2.7. Discussion and findings (Table 7)

The purpose of Table 7 is to have an idea about involvement of IT professionals in important issues like salary. The results indicate that level of IT professionals involvement is just 13% and the organizations are taking important decisions about IT professionals without involving them.

4.3. Inter correlation of the variables

The Pearson correlation findings show that all the Independent variables, i.e., Pay, Supervisor support and Training and Development are positively and significantly related to Organizational Commitment.

4.3.1. Discussion and findings (Table 8)

Out of different demographics age and tenure were used to find out if they have any impact on the level of organizational commitment of IT professionals in Pakistan. The discussion for Tables 2 and 6 indicate that, majority of the respondents were young having up to four years tenure in their respective organizations. According to correlation analysis age has no significant relationship with Organizational commitment in IT professionals that shows that the age has no effect because the behavior pattern regarding commitment is the same because all of the equally wait for better opportunities in a developing country like Pakistan (0.105). This argument is further strengthened by the correlation value of organizational tenure (0.021) which is insignificant and shows no matter how long a professional is with the organization when ever a better opportunity is around it will be availed. These values indicate that IT professional's organizational commitment in Pakistan has weak link with age and tenure, i.e., with more experience within the organizations and increase in age organizational commitment remains un-affected. Dockel (2001) argues age and tenure are not correlated with any form of commitment. Similarly these findings are also supported by Mathebula (2004) who found no correlation between organizational commitment and demographics like age and tenure.

According to Correlation Analysis Compensation has a significant relationship with organizational commitment $(0.30^{**}, ^{**}p < 0.01)$. Dockel (2001) also found a significant relationship between Compensation and overall Organizational Commitment $(0.37^{**}, ^{**}p < 0.01)$. Thus results are supported by Dockel (2001). Johns (2005) also found positive relationship between earning and continuance commitment, however it was not significant. However the response from the IT professionals in the questionnaires indicated that majority IT professionals were not satisfied with their salary structure. As highlighted in Table 7 about 87% of IT professionals feel that they are not involved in salary related issues. Thus the Public sector organizations make decisions about different salary related issued of IT professionals without involving them which can be a major cause for their dissatisfaction with salary. Being the backbones of public sector IT organizations they must be involved in incentive schemes to increase their level of Organizational Commitment and retention in these organizations.

The relationship between Supervisor support and organizational commitment is also significant $(0.340^{**}, ^*p < 0.01)$. Dockel (2001) also found a relationship between Supervisor Support and overall Organizational Commitment $(0.36^{**}, ^*p < 0.01)$. The IT professional feel that they are praised on positive performance by their boss. They are provided with a feed back on their performance. The findings are supported by Dockel (2001) and Soulen (2003). Raabe and Beehr (2003) also found a negative relationship between supervisor support and turnover intention. Recognition on job well done intrinsically motivates individuals so the organizations should take such steps that IT professionals are not under valued. Moreover organizations should devise a mechanism so that efforts of IT

professionals towards organizational objectives are acknowledged and seen positively by the supervisors.

The relationship between Training and development and organizational commitment is also significant $(0.349^{**}, **p < 0.01)$. These findings are supported by Shelton (2001) but Dockel (2001) did not found a significant relationship though it was positive. The response from questionnaire indicate that the IT professionals feel they are not being provided the job related training and sufficient time is not allocated for this training. These professionals are working in an industry where new technology is replacing the existing technology quite swiftly and training is the only way through which these professionals can update their knowledge about the new technologies. Hence the organizations should devise a detailed training program after necessary need assessment and allocate sufficient time for training of these professionals.

5. Conclusion

Majority of the studies were conducted measuring the relationship of three components of organizational commitment, i.e., Normative, Continuance and affective components with different variables such as pay, Job characteristics, Supervisor support etc. and some also found the relationship between organizational commitment and these factors as a whole. Since no such study was conducted on Information Technology (IT) professional in Pakistan the study found the relationship of three variables, i.e., Pay, Supervisor support and Training and Development on Organizational commitment as whole.

The first hypothesis of present study was that compensation is significantly and positively related to organizational commitment. From the above discussions and significant correlation values it is established that among high technology IT professionals in Pakistan compensation is significantly and positively related to organizational commitment. Thus hypothesis one is established.

The second hypothesis intended to find out positive and significant relation ship between organizational commitment and training and development. The findings clearly indicate that training is significantly and positively related to organizational commitment. Hence hypothesis two is also established.

The third hypothesis of the study was that supervisor support is significantly and positively related to Organizational Commitment. The results obtained by correlation analysis clearly establishes the hypothesis that supervisor support is significantly and positively related to Organizational Commitment.

In their conclusion, Paré and Tremblay (2000) argued that IT specialists should not be managed as disposable productive resources but considered as humans with specific needs and interests such as equity and justice, opportunity to learn and innovate, recognition of peers and managers, attainment of new levels of responsibility, and empowerment. We support this statement with the view that the role of IT professionals is becoming increasingly important for organizations through

out the world and in Pakistan as well. The business mangers should devise such HR policies that these professionals find them at a place where they have a compensation package which is competitive to any other organization. IT professionals must be provided trainings frequently not only for their personal development but also to gain the competitive advantage through latest technologies. The supervisors of these IT professionals should recognize that managing IT professionals is different than other professionals; they should be involved in decision making to increase level of organizational commitment.

It is also important to note that many developed countries are offering attractive immigrations to IT professionals at priority which is causing a brain drain from Pakistan. Based on above findings immediate measures are required at the Government level for retention of this intellectual capital not only in the organizations but also in Pakistan.

6. Future studies

The literature review indicated that there a number of other factors which affect Organizational Commitment of IT professionals. The following future studies are recommended:

- (i) Factors like Job characteristics, Career opportunities and Work life Polices etc can also be used to see their relationship with organizational commitment.
- (ii) A larger sample from different cities of Pakistan can also be collected for same study.
- (iii) A large number of IT professionals are working in Private sector. Their response on similar variables can be obtained to have a comparison of level of organizational commitment of Public sector and private sector IT professionals in Pakistan.

Appendix A. Questionnaire

A.1. Demographics

Please tick the appropriate answer or fill in the box

1. How would you classify your job?	
IT Professional	1
Other professional (engineers etc)	2
2. How long you have been employed in this company (Years)?	
3. How many hours on average do you work per week?	
Less than 40 hours	1
More than 40 hours	2

4. Are you involved in salary incentive schemes by the organization?	
Yes	1
No	2
5. What is your highest qualification?	
Bachelors	1
Masters	2
M.Phil/MS	3
Doctoral	4
6. What is your native language?	
Urdu	1
English	2
Punjabi	3
Sindhi	4
Pushto	5
Balochi	6
Others	7
7. What is your marital status?	
Married	1
Un-married	2
8. What is your Gender?	
Male	1
Female	2
9. What is your age?	

A.2. Organizational commitment

Please tick one of the five choices

10. This organization has a	great deal of person	al meaning for me		
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5
11. Right now, staying in th	nis organization is a	matter of necessity.		
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5
12. I owe a great deal to m	y organization.			
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5
13. It would be very hard for	or me to leave the or	rganization even if I	want to	
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5
14. I feel I have few options	s leaving the current	organization?		
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5
15. I do not feel emotionall	y attached with this	organization.		
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5
16. I would feel guilty if I le	eave the organization	1.		
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5
17. I really feel as if this or	ganization's problem	s are my own?		
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5
19. I do not feel part of fa	amily in my organizat	ion.		
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5
20. I would not leave the	organization as I have	e a sense of obligatio	n towards it.	
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5
21. I do not feel strong se	nse of belongingness t	to my organization.		
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5
22. I do not feel any oblig	gation to stay with my	current employer.		
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5
23. I would be very happy	to spend rest of my	career with this organ	nization.	
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5
24. Even to my own adva-	ntage I would not leav	ve the organization.		
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5
25. This organization dese	erves my loyalty.			
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

A.3. Compensation

Please tick one of the five choices

26. My Benefit packages					
Highly dissatisfied	Dissatisfied	Neutral	Satisfied	Highly satisfied	
1	2	3	4	5	
27. Most recent raise in my s	alarv		·		
Highly dissatisfied	Dissatisfied	Neutral	Satisfied	Highly satisfied	
1	2	3	4	5	
28. Information about pay iss	sues provided to me by	company			
Highly dissatisfied	Dissatisfied	Neutral	Satisfied	Highly satisfied	
1	2	3	4	5	
29. My current salary packag	es(Basic pay, benefits,	incentives).			
Highly dissatisfied	Dissatisfied	Neutral	Satisfied	Highly satisfied	
1	2	3	4	5	
30. My organization's pay structure					
Highly dissatisfied	Dissatisfied	Neutral	Satisfied	Highly satisfied	
1	2	3	4	5	
31. Influence my Boss has on	my salary				
Highly dissatisfied	Dissatisfied	Neutral	Satisfied	Highly satisfied	
1	2	3	4	5	
32. Consistency of company's salary policy.					
Highly dissatisfied	Dissatisfied	Neutral	Satisfied	Highly satisfied	
1	2	3	4	5	
33. The number of benefits I receive (house, car, telephone etc)					
Highly dissatisfied	Dissatisfied	Neutral	Satisfied	Highly satisfied	
1	2	3	4	5	

34. How my salary is incre	ased (on performance	or some other me	asure)		
Highly dissatisfied	Dissatisfied	Neutral	Satisfied	Highly satisfied	
1	2	3	4	5	
35. Size of my incentives					
Highly dissatisfied	Dissatisfied	Neutral	Satisfied	Highly satisfied	
1	2	3	4	5	
36. How the company administers the pay					
Highly dissatisfied	Dissatisfied	Neutral	Satisfied	Highly satisfied	
1	2	3	4	5	

A.4. Training and development

Please tick one of the five choices

37. My organization is providing me job related training					
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1	2	3	4	5	
38. I can apply what I lea	rnt from training at m	ny job			
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1	2	3	4	5	
39. There are enough development opportunities for me in my organization					
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1	2	3	4	5	
40. Sufficient time is allocated for training					
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1	2	3	4	5	
41. I have opportunity to be involved in activities that affect my professional development					
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1	2	3	4	5	

A.5. Supervisor support

Please tick one of the five choices

42. My Boss praises positive performance in private and in presence of others.					
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1	2	3	4	5	
43. I feel under valued by my l	boss.				
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1	2	3	4	5	
44. My Boss never gives me feed back how well I completed the task.					
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1	2	3	4	5	
45. My Boss gives a reward to good idea by implementing it and giving credit to responsible official.					
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1	2	3	4	5	
46. My Boss seldom recognizes a job well one.					
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1	2	3	4	5	
47. My boss often lets me know how well I am performing the job.					
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1	2	3	4	5	

References

- Ahmad, K.Z., Bakar, R.A., 2003. The association between training and Organizational Commitment among White collar workers in Malaysia. International Journal of Training and Development 7930, 166–185.
- Allen, N.J., Meyer, J.P., 1990. measurement and antecedents of affective, continuance and normative commitment to the organization. Journal of Occupational Psychology 63, 1–18.
- Chew, Y.T., 2005. Achieving Organizational Prosperity through Employee Motivation and Retention: A Comparative Study of Strategic HRM Practices in Malaysian Institutions. Research and Practice in Human Resource Management 13 (2), 87–104.
- Dockel, A., 2001. The effect of Retention factors on Organizational commitment: An investigation of High Technology Employees. M.Com dissertation, Faculty of Economics and Management Sciences, University of Pretoria, Pretoria.
- Irving, P.G., Cawsey, T.F., Cruikshank, 2002. Organizational Commitment profiles. Implications for turn over intention and psychological contracts. Wilfred Laurier University, ASAC 2002, Winnipeg, Manitoba.
- Iverson, R.D., Buttigieg, D.M., 1999. Affective, Normative and Continuance Commitment, Can the 'Right Kind' of commitment be managed? Journal of Management studies 33 (3), 022–2380.
- Johns, R., 2005. Determinants of Organizational commitment among U.S. workers. Masters thesis, Mc Anulty Collge and Graduate School of Liberal Arts, Duquesne University.
- Kreisman, B.J., 2002. Insights into employee motivation, commitment and retention. Ph.D Research/White paper, University of Texas.
- Lee, H.R., 2000. An Empirical Study of Organizational Justice as a Mediator of the Relationships among Leader-Member Exchange and Job Satisfaction, Organizational Commitment, and Turnover Intentions in the Lodging Industry. Ph.D. dissertation, Polytechnic Institute and State University, Blacksburg, Virginia.
- Mathebula, M.R.L., 2004. Modeling the relationship between Organizational Commitment ,Leadership Style, Human Resource Practices and Organizational Trust. Ph.D dissertation, faculty of Economics and Management Sciences, University of Pretoria, Pretoria.
- Mayer, J.P., Stanley, D., Hescovitch, L., Toplnytsky, L., 2002. Affective, Continuance and Normative commitment to the organization.: A meta analysis of Antecedents, Correlates and Consequences. Journal of Vocational Behavior, 52–61.
- Moynihan, L.M., Boswell, W.R., Boudreau, J.W., 2000. The influence of Job Satisfaction and Organizational Commitment on Executive withdrawal and Performance, Working Paper, Center for Advanced Human Resource Studies, School of Industrial and Labor Relations, Cornell University, New York.
- Paré, G., Tremblay, M., 2000. The Measurement and Antecedents of Turnover Intentions among IT Professionals, Scientific Series, CIRANO, 2000ss-33.
- Raabe, B., Beehr, T.A., 2003. Formal Mentoring Versus Supervisor and Coworker relationships: differences in perception and impact. Journal of Organizational Behavior 24, 271–293.
- Rossi, J.F., 2000. Report on Employee retention, Why do employees stay with a company, Business 471-Research Seminar on Organizational Management.
- Shelton, K., 2001. The effects of employee development programs on Job satisfaction and employee retention. Master of Science in Training and Development research Paper, The Graduate College, University of Wisconsin-Stout, Menomonie, WI 54751.
- Sjoberg, A., Sverke, M., 2000. The interactive affect of job involvement and organizational commitment on job turnover revisited: A note on mediating role of turnover intention. Scandinavian Journal of Psychology 41, 247–252.
- Soulen, S.K., 2003. Organizational Commitment, Perceived Supervisor Support, and performance: A field study. Master of Arts dissertation, University of Tennessee, Knoxville.