
JOB SATISFACTION ON JOB PERFORMANCE OF EMPLOYEES IN INFORMATION TECHNOLOGY INDUSTRY

¹Dr. Somasekhar Donthu, MBA, Ph.D., UGC NET, APSET

Associate Professor,
Mittal School of Business
Lovely Professional University,
Phagwara, Punjab.
Email: somuecom@gmail.com

²Dr. P. Subramanyam

Associate Professor & HOD
Department of Management Studies
Annamacharya Institute of Technology & Sciences, Rajampet
Email: subbu_phd@yahoo.com

Corresponding Author: **¹Dr. Somasekhar Donthu, MBA, Ph.D., UGC NET, APSET**

Abstract:

This research article aims to “To measure the impact of key predictors of job satisfaction on job performance of employees in IT industry”. The paper applies data reduction using Confirmatory Factor Analysis (CFA) on a sample of 364 respondents drawn from IT industry in the Bengaluru and condenses a set of 12 job satisfaction items converted into a four key predictors. The present study proposes a model of the impact of key predictors of job satisfaction on job performance. The study found that pay, supervision, work itself and promotion are impacting significantly the job performance. Therefore, IT companies should focus on the above factors to job performance of employees. The study investigated the impact of key predictors of job satisfaction on job performance of the employees in IT industry concluded that pay had the highest impact on the job performance of the employees’ supervision, work itself followed by promotions.

Key words: Pay, Supervision, Work itself, Promotion, Job Satisfaction and Job Performance.

Introduction

In today’s global context many organizations are facing intensive challenges to improve the employee’s job satisfaction and as a result, improve their organizational commitment to gain competitive advantage as well as maintain retention of their key employees. Great interest of organizational topics that related to attitude and behavior such as organizational commitment, job satisfaction and job performance has been sparked by its potential benefits to individuals and organizations. According to Steinhaus & Perry (1996) cited in (Samad, 2011) committed and satisfied

employees are unlikely to indicate low performance and are normally highly productive who identify with organizational goals and organizational values. Organizations that are successful in the industry realize that employee retention is very essential in order to achieve market leadership and growth in the market place. People are the most important resources/assets of any organization, thus employees are company's livelihood. How they feel about the work they are doing and the results received from that work directly affect an organization's performance and eventually its stability. Generally, employees will be more satisfied when they feel that they are rewarded fairly for the work they have done by making sure the rewards for them are genuine contributions to the organization and consistent with the reward policies.

Apparently monetary gain is simply one aspect of these rewards; additionally these rewards may also include a range of benefits and perks. Employees with higher job satisfaction are important since they believe that the organization has a valuable future in the long term and the employer will acknowledge and reward their work. Therefore, those employees are more dedicated to the organization, have higher retention rates and also likely to have higher productivity (efficiency & effectiveness). On the other hand individual and group performances are the key to achieve organizational performance. Hence, the performance of the organization can be identified at three levels, thus individual level, group level and organizational level (Gibson et al., 1979).

Organizational performance depends upon individual and group performance. Organizations consist of people performing jobs alone and with others. From this explanation by Gibson et al., (1979) it can be understood that the individual performance is the heart of organizational performance and that the individual job performance is related to individual employee job satisfaction since it is apparent that individual job satisfaction ultimately lead to the organizational performance as well. The general consensus across industries and organizations is that the loss of skilled IT Professionals is expensive. Estimates of cost of replacing technology workers range from roughly 1.5 times their annual salaries to 2.5 times annual salaries (Longnecker & Scazzero, 2003). In addition to the cost of replacing experienced IT staff, turnover takes its toll on productivity and morale through disruptions of projects, heavier workload, and negative impact on team cohesion. Industry experts propose that the cost of losing a scientist or engineer can be three to six the cost of losing a manager (Kochanski & Ledford, 2001). Some sources view high turnover as an inevitable consequence of the tremendous demand for technology skill. Moving beyond from assessing job satisfaction and job performance of traditional manufacturing and service based organizations, this research aimed at finding out the impact of job satisfaction on job performance of Information Technology service providing sector. This is specially a significant concern in IT industry where specialist training and retention are highly important. This study purposely focused only on software developers/engineers as opposed to IT employees in general due to the critical nature of their work. Apparently the factors leading to job satisfaction and impact to the job performance in this field are poorly understood; therefore, this study was designed to further understand the relationship between job satisfaction and job performance among IT Professionals. It was evident that employee dissatisfaction not only leads to poor performance but for the employee turnover as well.

The knowledge worker turnover behavior in which only 6% satisfied with their current job with the current employer while 24% intended to leave the current employer, if they get a better job offer from another IT company in Sri Lanka and being a lucrative global industry, another 24% intended to leave, if they get a job offer or a permanent residency in a foreign country (Jinadasa & Wickramasinghe, 2009). Hence this research was conducted based on a wellrecognized pioneering global IT Company1 in Sri Lanka, who cater to both local and international markets and over 15 years of industry experience and their current head count in Sri Lankan office exceeds 650 including software engineers. It is evident that to obtain great performance, the organization needs satisfied and committed employees. If the employees are not satisfied that may directly affect their work output and performance and may further create an unstable situation. Considering those mentioned facts, it is important to assess any association between job performance and job satisfaction of IT Professionals. Hence the main intention of this research was to investigate how IT Professionals/Software Engineers job satisfaction could be affected to their respective job performance in different ways thus organization can come across with possible solutions. For instance longer the companies keep their employees the less need there would be for additional expenditure to train new employees. Thus in IT industry training and skill development is highly crucial to the employee performance as well to the organizational performance.

Literature Review

Job Satisfaction is one of the main attitudes that can influence human behavior in the work place. Job Satisfaction is the degree to which individuals feel positively or negatively about their jobs (Woods & Weasmer, 2008) and it is generally recognized as a multifaceted construct that includes employee feelings about a variety of both intrinsic and extrinsic job elements. Therefore, organizational behavior researchers are eager to analyze, understand and measure job satisfaction and its consequences for people at work (Woods & Weasmer, 2008). Job satisfaction may be affected by emotion related personality traits because job satisfaction has been equated with a pleasurable emotional state (Locke, 1976). Personality traits are relevant for job choice and for being selected and promoted by the organization (Hogan, 1971). Also job satisfaction results from a person's view of their job. This is based upon work environment conditions such as the mentality of seniors/supervisors, company policies and process, working conditions and additional benefits (Gibson et al, 1979). Workers will have high job satisfaction when they have positive attitudes toward such job factors such as the work itself, recognition and opportunity for advancement (DuBrin, 1997). There are five job dimensions representing the most important aspects that affect an employee job satisfaction. These include the work itself, pay, promotion opportunities, supervision and co-workers (Luthans, 2002). Thus Pay, Promotion, Supervision and Work Itself were taken as the dimensions of job satisfaction of this research study.

Employees job satisfaction is strongly linked to the company's pay system (Greenberg & Baron, 1995). The overall objective is to reward people fairly, equitably and consistently in accordance with their value to the organization in order to further the achievement of the organizations strategic goals (Armstrong and Murlis, 1998). A fair and equal pay system would encourage job satisfaction (Lawler, 1981). Further, he says things such as bonuses and annual salary

increments would more encourage employee job satisfaction. For the purpose of this study, pay is defined as the employee pay, which is adequate for their normal expenses. Hence compensation is the main indicator of the dimension of payment. Apart from that it covers bonus and salary increments also. The employee is satisfied with the pay and pay is provided according to the working experiences and equal to the work done. Several practical studies have found a strong positive link between employee payment and job performance (Baron & Armstrong, 1998; Robbins & Decenzo, 2005).

Lack of promotions and other job enhancements, such as training, have a more adverse effect on job satisfaction than even excessive amounts of work or low pay (Shields & Ward, 2001). An employee's career growth and status would encourage them to seek out promotions (Locke, 1976). With respect to that, promotions can be considered as a tool by management for increasing employees' motivation and job satisfaction levels. Position advancements, generating positive moral among employees and ensuring job security had a great potential of creating employee job satisfaction (Gouws, 1995). It should be noted that those who may receive promotions in an unfair manner, perhaps through known connections are likely to create rifts among the genuine workers. This in turn can create job dissatisfaction. In the context of this study, promotion is defined as the fair chance for the employee to get promoted. Advancement, morale, value and security were considered as the indicators of the dimension promotion. Positive promotion aspects elevate levels of job satisfaction and that will increase the employee job performance (Gouws, 1995).

Good supervision is the key to maintaining high job satisfaction levels. In instances where supervisors engage employees in tasks which involve higher levels of responsibility, employees are likely to feel more valued thereby gaining a notion of achievement and success (Glicken, 2005). According to Trempe et al, (1985) employees who receive respect and consideration from their seniors are more satisfied than employees who experience otherwise. Apart from that employees such as technical teams would expect technical supervision of their work; continuous basis technical supervision and support could generate satisfaction especially among knowledge workers in different types of organizations. For the context of this study, supervision can be defined as how the supervisor treats the employee in terms of praise, the employee's good work, seeking the advice from the employee, understanding the nature of the employee's work as well as giving the employee enough supervision and at the same time portraying good an example to the workers. Therefore the supervision dimension under job satisfaction variable was tested using the indicators of supervision of human relations and supervision of technical relations. An effective supervisor provides assistance to staff employees in meeting their personal and professional goals within the environment of the division and the institution. This will generate employee satisfaction and result in high performance. There are several practical studies that have found a strong positive relationship between supervision and job performance (Winston and Creamer, 1997).

The work itself refers to the working environment of the workers and their perception about the job itself that they are responsible for. Oxford Advance Learner's Dictionary (1995), defines the work itself as "what is done by somebody". Similarly the work itself also refers to the working environment of the workers and their perception about the job itself that they are responsible for. Cohen et al. (1999) identifies that ability to utilization, achievement, activity, authority, creativity,

independence, responsibility and variety are the main indicators of employee work itself. And also in his research, he mentioned that work itself and its indicators have a positive relationship with employee job performance. The job or work will give the employee a sense of achievement and responsibility. The work itself refers to the working environment of the workers and their perception about the job itself that they are responsible for. The definition of the work itself for this study is how the employee perceives their current work as fun, comfortable, challenging or respected by others. Indicators tested under the dimension work itself were ability to utilization, achievement, activity, authority, creativity, independence, responsibility, and variety. A lot of early studies (Cohen, 1999; Randall and Cote, 1991) have found that work itself is an important and influential casual factor, which has a positive relationship with organizational employees work performances.

Research Gap

The literature review reveals that numerous revisions have followed on the relation amongst employee satisfaction and employee performance. (Sailaja. A, 2017) There is research gap about the relation between job satisfaction and job performance. There is an enormous range to make study that investigates by using of structural equation model for predicting the impact of job satisfaction on job performance of employees in Information Technology Industry. (Swetha. G, 2017) had mentioned the following area for further research. They have designated only middle level employees to study the concept of job satisfaction and job performance. She was recommended creating a study covering all groups of employees predominantly in IT sector by making an allowance for a large sample of respondents.

Afterwards the identification of research gaps, researcher has nominated the topic on structural equation model for predicting the impact of job satisfaction on job performance of employees in Information Technology Industry.

Research Problem

Organizations at this cutthroat epoch, is in a strong intention of hiring of and retaining the most suitable employees. In order to accomplish this purpose, performance evaluation has become a strong necessity for both the employees and employers in different senses. On evaluating employees in consonance with their professional and social aspects, numerous psychological and behavioral features are also to be accounted into. In a competitive business environment prevails all over the globe, this process of evaluation has emerged into a superior dimension of assisting and managing the performance of employees. This approach invariably estimates the worthy contributions of an employee on the whole and thereby acknowledges the imperative relationship of performance with employees' psychological factors like job satisfaction, emotional intelligence, organizational citizenship behavior, work motivation, professional integrity, etc.

This research tries to identify the impacts of job satisfaction dimensions on job performance of employees in IT Industry. It investigates the relationship between the dimensions of job satisfaction and the job performance of the respondents and thereby to cross check whether the former influences the latter in a positive sense or not.

Research Objective

1. To identify the key predictors of job satisfaction in IT industry

2. To measure the impact of key predictors of job satisfaction on job performance of employees in IT industry

Research Hypothesis

Ho1: There is no significant relationship between employee opined job satisfactions on job performance.

- **Ho1.1:** There is no significant relationship between employee opined payments on employee retention.
- **Ho1.2:** There is no significant relationship between employee opined works-itself on employee retention.
- **Ho1.3:** There is no significant relationship between employee opined supervision on employee retention.
- **Ho1.4:** There is no significant relationship between employee opined promotion on employee retention.

Statistical Tools

- Composite Reliability
- Confirmatory Factor Analysis (CFA)
- Multiple Linear Regression

Research methodology

Purpose of this study was hypothesis testing as this study was conduct to establish and explain the relationship between job satisfaction and job performance. The type of the investigation was correlational since the study has conducted in no contrived settings. The unit of study in this research was an individual. Specifically, IT professionals since the data were gathered from employees of a well-recognized global IT Companies in Bengaluru city.

The study was conducted with the help of self-administered questionnaires which prepared according to the measures of above mentioned dimensions. Five point Likert scale was used to weight from strongly disagree to strongly agree and the questionnaires were distributed personally, mailed to the respondents, and electronically distributed. Total employees IT companies working in the mentioned company was the population of this research study. There were 463 employees working in this organization and 364 employees were selected to the sample by using simple random sampling technique (lottery method). The questionnaire method was chosen for data collection purpose assuming anonymity of the respondents. The collected data was analyzed by statistical data analysis package, IBM AMOS version 20.0

Data Synthesis

Composite Reliability

Table: 1. Composite Reliability

	CR
Payment	0.932
Work-itself	0.804
Supervisor	0.812
Promotion	0.767

The above table represents four factors composite reliability values (Payment 0.932; Work-itself 0.804; Supervisor 0.812 and Promotion 0.767) are more standard value 0.70. So, the data is reliable.

Confirmatory Factor Analysis of Job Satisfaction Predictors

The measures adopted to study the job satisfaction predictors have already been validated by other researchers as mentioned earlier. So, we have only conducted a confirmatory factor analysis in order to establish the valid factor structure of Job Satisfaction predictors. The proposed four-factor model (see Figure 1) was found to fit the research study. The model with a chi-square of 423.911, $df = 126$ CFI = 0.849, TLI = 0.809, AIC = 611.901, RMSEA = 0.071. Good fit values that are generally acceptable for CFI and TLI should be near to 0.91 and for RMSEA should be less than 0.08 (Hair et al., 2010).

AMOS output of the measurement model or CFA –Standardized

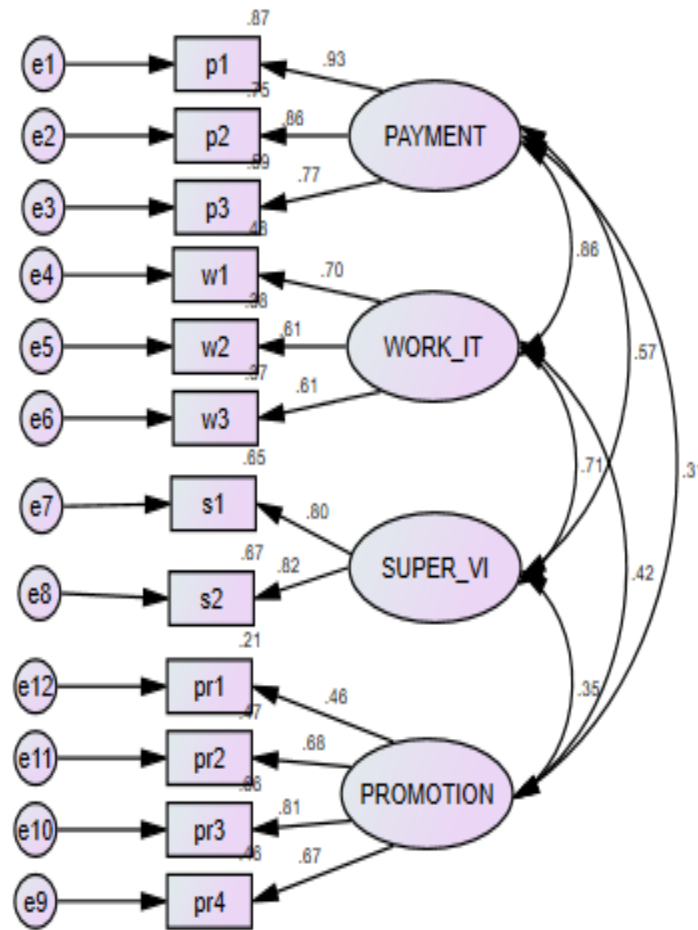


Figure: 1. AMOS output of the measurement model or CFA –Standardized

Selected Variables Expansion

PAYMENT (Payment), WORK_IT (Work-Itself), SUPER_VI (Supervisor) and PROMOTION (Promotion).

Table: 2. Confirmatory Factor Analysis of Alternative Models

Model	χ^2	Df	χ^2/Df	TLI	CFI	RMSEA
Six-Factor Model	423.911	126	3.364	.809	.849	.091

Job satisfaction predictors (Payment, Work-Itself, Supervisor and Promotion). Figure 1 shows a significant inter-factor correlation between payment and work-itself at a significant level ($r = 0.86$, $p < 0.05$), payment and supervisor ($r = 0.57$, $p < 0.05$), payment and promotion ($r = 0.31$, $p < 0.05$), work-itself and supervisor ($r = 0.71$, $p < 0.05$) and work-itself and promotion ($r = 0.42$, $p < 0.05$), and finally supervisor and promotion. The result of the confirmatory factor analysis of alternative models is displayed in table 2.

Multiple Linear Regressions

In order to test hypothesis 1, we performed a regression analysis. In the regression analysis technique, we have regressed four job satisfaction predictors on job performance of IT employees.

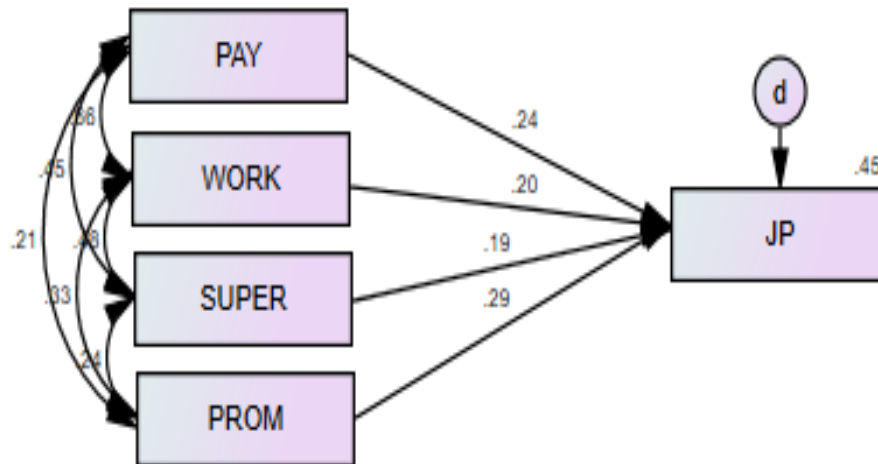


Figure: 2. Structural Model Path Analysis

Structural Model Fit Estimation

Figure 2 indicates the standardized path regression coefficients and the relationship between unobserved and observed variables with respect to the path diagram. Structural model Fit Indices:

Indices	Recommended Value	Model Fit Indices
CMIN/Df	< 3	2.652
p-value	≥ 0.05	0.000
GFI	≥ 0.90	1.000
AGFI	≥ 0.80	0.932
NFI	≥ 0.90	1.000
CFI	≥ 0.90	1.000
RMSEA	≤ 0.08	0.063
P Close	≥ 0.05	0.000

The structural model fit is checked based on CMIN/df, p-value, Goodness of Fit (GFI), Adjusted Goodness of Fit (AGFI), NFI, Comparative Fit Index (CFI), Root Mean square of approximation (RMSEA) and P Close. The Model fit indices for the constructs have been found and the summary of the result is shown in the above table where the obtained Model fit indices are compared with the recommended value. We have not considered the actual chi square value as the chances of model rejection will be high when the sample size increases. Hence we have divided the chi square value with the degrees of freedom so that we can overcome the sample size issue. The result of chi square value divided by the degrees of freedom is shown in the table as 2.652 which is below than the acceptable limit 3. The obtained p-value is 0.05 which is equal to the recommended value. The obtained GFI value is 1.000 which is above the recommended value of 0.9. The obtained AGFI value

is 0.932 which is above the recommended value of 0.80. The obtained NFI value is 1.000 which is greater than the recommended value of 0.90. The obtained CFI value is 1.000 which is greater than the recommended value of 0.90. The obtained RMSEA value is 0.063 which is lesser than the recommended value of 0.08. The obtained P-close value is 0.000 which is lesser to the recommended value of 0.05. Hence we can find the overall model fit indices are within the acceptable recommended values as proposed by the researchers, so we can conclude that the hypothesized model fits with the sample data. All the 12 parameters have met all the other recommended value to verify fitness of the Model. Hence we can conclude that the Model is perfectly fit.

Testing Structural Relationships

To know whether the hypothesized paths are significant or not, the standardized regression weights of the output of the hypothesis path are compared against the p-value. The below table shows the relationship between Independent and dependent variables with respect to Hypothesis. By referring to the P value, each and every hypothesis has been specified whether it is significant or not significant. The result shows that the hypothesized model fits with the obtained sample data.

The summary and interpretation of the result are given below:

Payment

The probability of getting a critical ratio as large as 10.559 in absolute value is less than 0.001. In other words, the variance estimate for payment is significantly different from zero at the 0.001 level (two-tailed).

Work-itself

The probability of getting a critical ratio as large as 10.559 in absolute value is less than 0.001. In other words, the variance estimate for work-itself is significantly different from zero at the 0.001 level (two-tailed).

Supervision

The probability of getting a critical ratio as large as 10.559 in absolute value is less than 0.001. In other words, the variance estimate for supervision is significantly different from zero at the 0.001 level (two-tailed).

Promotion

The probability of getting a critical ratio as large as 10.559 in absolute value is less than 0.001. In other words, the variance estimate for promotion is significantly different from zero at the 0.001 level (two-tailed).

Estimated Standardized Regression of the hypothesis

S. No.	Hypothesis	Standardized Regression Weights	P	Significant/Not Significant
Ho _{1,1}	There is no significant relationship between employee opined payment on employee retention.	0.240	0.000	Significant
Ho _{1,2}	There is no significant relationship between	0.199	0.000	Significant

	employee opined work-itself on employee retention.			
Ho _{1,3}	There is no significant relationship between employee opined supervision on employee retention.	0.189	0.000	Significant
Ho _{1,4}	There is no significant relationship between employee opined promotion on employee retention.	0.294	0.000	Significant

Implications

- There was a positive concern from the higher officials of the organization for initiating the mentorship program which can take care of improving the satisfaction level of employees. It was also found that the confidence level of the employees who were subjected to the mentoring program was below expectation. More mentoring program can be put forwarded by the employer to up skill the employees, re-engineer their capabilities, efficiency and moral which will further help in building up a Healthy organization.
- When employees are engrossed in their work and they have an emotions attached with their organization, their work. Task or the work given should neither be burden nor get monotonous an individual should enjoy his / her work.
- It is always said when an employee is involved in decision making he feel motivated and start getting connected with the organization which future impact positively on his performances.

Conclusion

This study discovered that the level of job satisfaction dimensions (pay, promotion, supervision and work itself) of the employees were satisfied with the job they performed and also there were positive correlations exist between the job performance and each of the four job satisfaction dimensions. There can be a lot of factors that can create a performance drop of the employees. Some of them can be organizational commitment, job involvement, work environment conditions, work ethics, proper skills set, hygiene and motivational factors, etc. Among those various factors that influence the job performance, the job satisfaction dimensions of this study (pay, promotion, supervision and work itself) affect the job performance of employees. Thus, it should pay considerable attention to the employees job satisfaction and a change in satisfaction dimension brings a significant change to the job performance.

References

- Armstrong, M. (1998). *Baron, Performance Management: The new realities. IPD, London.*
- Armstrong, M., & Murlis, H. (2007). *Reward management: A handbook of remuneration strategy and practice.* Kogan Page Publishers.
- Cohen, D., & Vandello, J. (1999). Patterns of individualism and collectivism across the United States. *Journal of Personality and Social Psychology, 77, 279-292.*

- DuBrin, A. (1997). *Fundamentals of Organizational Behavior*, South-Western College Publishing. 44 - 45.
- Gibson, J., Ivancevich, J., & Donnelly, J. (1979). *Organizations* (3rd Ed),. Business Publications Inc, 61 – 67.
- Glicken, M. (2005). *Working with troubled men: A contemporary practitioner’s guide*. Lawrence Erlbaum.
- Gordan, E. (1993), the Agony of Forgetfulness. *Journal of Nutrition Health Review* (IWHR).
- Gouws, A. (1995). The relationship between motivation and job satisfaction of a group of information specialists. *Rand Afrikaans University, Johannesburg*.
- Greenberg, J., & Baron, R. (1995). *Behavior in organizations*, 5th ed. Prentice-Hall.
- Hogan, R. (1971). Personality Characteristics of Highly Rated Policemen, *Personnel Psychology*, 24, 679-686.
- Jinadasa, L., & Wickramasinghe, V. (2009). IT Industry Labor Turnover: The Reality. 12)
- Kochanski, J. & Ledford, G. (2001). “How to keep me”: Retaining technical professionals. *Research Technology Management*, 44 (3), 31–38.
- Lawler, E. (1981). *Pay and Organization Development*. Addison-Wesley.
- Locke, E. (1976). Nature and Causes of Job Satisfaction. In *Handbook of Industrial and Organizational Psychology in MD Dunnette, Rand McNally.*, (1297–1349).
- Longenecker, C. & Scazzero, J. (2003), "The Turnover & Retention of IT Managers in rapidly changing organizations', *Information Systems Management*, 20(1), 58-63.
- Luthans, F. (2002). *Organizational Behavior* (9th Ed), McGraw-Hill Companies Inc. 224 – 230.
- Opatha, H. (2002). *Performance Evaluation of Human Resources*. Institute of Management and Science, 2nd Ed, 18.
- Porter, L., & Lawler, E. (1968). What Job Attitudes Tell About Motivation? *Organizational Development: Part 3, Harvard Business Review*, 70-79.
- Randall, D. M. and Cote, J. A. (1991). `Interrelationships of work commitment construct', *Work and Occupation*, 18, 194-211.
- Robbins, S. P., & Decenzo, D. A. (2005). *Fundamentals of Human Resource Management*. Jon Willey & Sons Inc, 2nd Ed.
- Rouse, P. D. (2001). Voluntary turnover related to Information Technology Professionals: A Review of Rational and Instinctual models. *The International Journal of Organizational Analysis*, 9(3), 281- 290.
- Samad, S. (2011), The Effects of Job Satisfaction on Organizational Commitment and Job Performance Relationship: a Case of Managers in Malaysia’s Manufacturing Companies, *European Journal of Social Sciences*, 602-611.
- Shields, M., & Ward, M. (2001). Improving nurse retention in the National Health Service in England: the impact of job satisfaction on intention to quit. *Journal of Health Economics*.
- Trempe, J., Rigny, A.J., & Haccoun, R. R. (1985). Subordinate satisfaction with male and female managers: Role of perceived supervisory influence. *Journal of Applied Psychology*. 70(1), 44-47.

- Winston, R.B. & Creamer, D.G. (1997) *Improving Practices in Student Affairs*. A Francisco: Jossey Bass 26)
- Woods, A. M., & Weasmer, J. (2002). Maintaining job satisfaction: Engaging professionals as active participants. *The Clearing House*. 75(4), 186 – 189.
- Zeffane, R., Wood, J., & Wallace, J. (1998). *Organizational Behavior; an Asian- Pacific Perspective*, (2nd Ed), Jacaranda Wiley Ltd. 143-151.