

Predicting Organizational Commitment via Job Satisfaction, Gender, Age, Experience, and Position: An empirical Investigation in a Private Financial Institution in Bahrain

Muath Eleswed, PhD

Assistant Professor of Management
College of Business & Economics
American University of Kuwait
P.O. Box 3323, Safat 13034
Kuwait

Fatema Mohammed, MBA

Associate Value Specialist
New York Institute of Technology
Campus 851, Road 3828 Block 338
Adliya, P.O. Box 11287
Kingdom of Bahrain

Abstract

The purpose of this study was to investigate whether or not organizational commitment can be predicted by job satisfaction, gender, age, experience, and position in a private financial institution in Bahrain. One hundred and fifty-six subjects participated in this study. Using a stepwise multiple regression model, results revealed that job satisfaction was the only predictor of organizational commitment. Based on the results, implications and direction for further studies were made.

Keywords: Job Satisfaction; Organizational Commitment; Multiple Regression; Bahrain

1. Introduction

As a significant determinant of organizational commitment, job satisfaction has been well documented in numerous studies (Porter *et al.*, 1974; Mottaz, 1987; Williams & Anderson, 1991; Vanderberg & Lance, 1992; Knoop, 1995; Young, Worchel & Woehr, 1998; Testa, 2001). Job Satisfaction and organizational commitment are two of the most prevalent work attitudes examined in the work and organizational literature. Hoppock (1935) defined job satisfaction as “a combination of psychological, physiological and environmental circumstances that causes a person to say: I’ m satisfied with my job”. Organizational commitment is an important topic in organizational behavior considering the large number of work that studied relationships between organizational commitment, attitudes and behaviors in the organization (Porter *et al.*, 1974, 1976; Koch & Steers, 1978; Angle & Perry, 1981).

Job satisfaction is considered as a reason for organizational commitment (Lincoln & Kalleberg, 1990; Mowday, Porter, & Steers, 1982; Mueller, Boyer, Price, & Iverson, 1994; Williams & Hazer, 1986). The reverse is also applicable where organizational commitment is a cause to job satisfaction (Vandenberg & Lance, 1992). Furthermore, when employees are satisfied with their jobs they become more committed to their organization and vice versa. Finally, according to Porter *et al.*, 1974; Mottaz, 1987; Williams & Anderson, 1991; Vanderberg & Lance, 1992; Knoop, 1995; Young, Worchel & Woehr, 1998; and Testa, 2001, job satisfaction can be assessed by organizational commitment and vice versa.

Based on the review of the literature, there is a need for further investigation of this topic particularly in the private sector in Bahrain. Thus, the purpose of this study is to investigate whether or not organizational commitment can be predicted by job satisfaction, gender, age, experience, and position.

2. Review of Related Literature

2.1 Job Satisfaction: Definition, Factors Affecting Job Satisfaction, and Significance

According to George and Jones (2008), job satisfaction is “the collection of feelings and beliefs that people have about their current jobs. People’s levels of job satisfaction can range from extreme satisfaction to extreme dissatisfaction” Others have defined job satisfaction as “a positive feeling about a job resulting from an evaluation of its characteristics” (Robbins & Judge, 2009, p. 83). Nelson and Quick (2009) defined it as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences”.

Hamermesh (2001) viewed job satisfaction as the employee’s mental classification of job into objective and subjective characteristics. However, Hirschfield (2000) stated, “Intrinsic job satisfaction is how people feel about the nature of the job tasks themselves, whereas extrinsic job satisfaction is how people feel about aspects of the work situation that are external to the job tasks or work itself”. In the industrial psychology literature, job satisfaction is noted as the positive emotional level gained by the employee when the employee gets a job appraisal (Locke, 1976). While Hoppock (1935) who is one of the earliest researchers in job satisfaction defined it as “a combination of psychological, physiological and environmental circumstances that causes a person to say: I’m satisfied with my job”.

In terms of factors affecting job satisfaction, according to Freeman (1978) and Hamermesh (1977), employees’ personal and job characteristics determine job satisfaction. According to Sloane, Battu, and Seaman (1995), “highly educated employees are more likely to suffer from educational mismatch”. Furthermore, the higher the level of education of employees is the lower their satisfaction (Clark, 1997). Although, having higher education raises the expectancy of having better job which leads to dissatisfaction and disappointment (Hagenaar, 1986; Ross & Reskin, 1992), Idson 1990 reports no significant effects of education level on overall job satisfaction.

Comm and Mathaisel (2000) found that “job satisfaction is influenced by the level of pay and performance, employee benefits, training, recruiting, learning curve inefficiencies, reduction in the client base, job design, life satisfaction, autonomy, growth satisfaction, satisfaction with co-workers, satisfaction with supervisors and customer satisfaction”. Further, job satisfaction is a cognitive and affective appraisal of a job viewed as a construct conceptualized in terms of beliefs and feelings regarding one’s job as discussed by (Fassina, Jones & Uggerslev, 2008).

In terms of the significance of job satisfaction on organizations and employees, more satisfied employees will add more value to the organization (Herzberg, 1957). Past studies in Europe and the USA proposed that job performance is positively influenced by employees’ job satisfaction (Freeman, 1978). Finally, Job satisfaction creates a pleasant feeling that directs to a positive work attitude. A satisfied employee is more likely to be creative, flexible, innovative and loyal. Furthermore, Job satisfaction can be used as a broad assessment of “an employee’s attitudes of overall acceptance, contentment, and enjoyment in their work” (Lee-Kelley et al., 2007).

2.2 Organizational Commitment Definition and Factors Affecting Organizational Commitment

Mowday, Steers, and Porter (1979, 1982) defined organizational commitment as the behavior that connects employees to the organization. Organizational commitment is how a loyal the employee feels to the organization (Mueller, Wallace, & Price, 1992; Price, 1997). Meyer and Allen (1991), Dunham et al. (1994) recognized organizational commitment as three kinds which are affective, continuous and normative. Affective commitment is the employees’ feelings toward joining the organization, continuous commitment is employees’ perceptions of costs if leaving the organization and normative commitment is employees’ perceptions of their duties and promises toward the organization.

Organizational commitment may be viewed as the degree to which an individual adopts organizational values and goals and identifies with them in fulfilling their job responsibilities (Tanriverdi, 2008). According to the literature, there are many factors affect organizational commitment including individual and managerial. In terms of the individual factors, Benkhoff (1997) found that as the employee gets a higher position in the organization he/she tend to have more organizational commitment. It has been seen that the longer the employee works for the organization the more commitment the employee has (Allen and Meyer, 1990; Hellriegel et al., 1995; O’Reilly et al., 1991). However, other studies did not show the same results (Lok & Crawford, 1999; Brewer, 1996).

Mathieu and Zajac (1990) believe that commitment increases with age while Cohen 1993 and Beck and Wilson 2000 stated that position upgrade is more valid than age. Decottis and Summers (1987) study showed that organizational commitment is under the effect of employee's qualities such as leadership and communication.

In terms of the managerial factors, several studies have showed that employees' involvement in decision-making (Porter et al., 1974; Mowday et al., 1982; Beck & Wilson, 1997) and the amount of feedback received from managers regarding job performance and job role (Mathieu & Zajac, 1990) affects the employees' organizational commitment.

Brewer (1993) suggested that large number of controlling officials in the organization frequently result in lower employee commitment, while less control and more support generates greater commitment and involvement among employees. Koopman (1991) studied the impact of leadership styles on employees and found that employees who liked their manager's style liked the organization more as well. Although there was no direct connection to commitment but this would later affect employees' levels of organizational commitment.

Finally, Nierhoff et al., (1990) found that the level of employees' commitment is related to top management's actions that create the organization's culture and style. In terms of the significance of organizational commitment, more committed employees are more responsible and loyal to the organization (Boles et al., 2007). Moreover, organizations that commit to the employees value and take care of them gain more committed workers (George & Jones, 1996). Eisenberger et al., (1990) discussed the same idea not only that employees are more committed but they are more careful for their duties, more involved in the organization, and more innovative.

2.3 Studies Related to Organizational Commitment

The influence of gender on organizational commitment remains unclear. Women as a group tend to be more committed to their employing organization than their male counterparts (Cramer, 1993; Mathieu & Zajac, 1990; Mowday et al., 1982). Loscocco (1990) found that women were more likely to report that they are proud to work for their organization and that they would accept almost any job offered to them in order to remain with their current employer. Several explanations have been offered to account for the greater commitment of female employees. Mowday et al. (1982) maintain that women generally have to overcome more barriers to attain their positions within the organization.

Numerous researchers have not found support for a relationship between gender and organizational commitment (Billingsley & Cross, 1992). Organizational commitment is an important topic of organizational behavior considering the large number of works that found relationships between organizational commitment, attitudes, and behaviors in the organization (Porter et al., 1974, 1976; Koch & Steers, 1978; Angle & Perry, 1981). Furthermore, Bateman and Strasser (1984) discussed the reasons for studying organizational commitment are related to "(a) employee behaviors and performance effectiveness, (b) attitudinal, affective, and cognitive constructs such as job satisfaction, (c) characteristics of the employee's job and role, such as responsibility and (d) personal characteristics of the employee such as age, job tenure".

The literature generally indicated an inverse relationship between organizational commitment and an individual's level of education, however the results are not clear (Luthans et al., 1987; Mowday et al., 1982). The higher an employee's level of education is, the lower that individual's level of organizational commitment (Luthans et al., 1987; Mathieu & Zajac, 1990; Mowday et al., 1982). The negative relationship may result from the fact that highly qualified employees have higher expectations that the organization may be unable to fulfil. However, the level of education does not seem to be consistently related to an employee's level of organizational commitment (Meyer & Allen, 1997). More educated individuals may also be more committed to their profession.

Further, Billingsley and Cross (1992) failed to find support for a relationship between education and commitment. Researchers view that a positive relationship exists between organizational commitment and level of experience (Larkey & Morrill; 1995; Meyer & Allen, 1997; Mowday, et al., 1982). Cohen and Gattiker (1994) found that type of position was a significant predictor of organizational commitment where managers have higher levels of commitment and pay satisfaction than non-managers because their income was higher. Mowday et al. (1982) however, did not find any significant differences in the commitment levels across type of position. Managers nowadays consider employees' job satisfaction more than before for the reason that more satisfied employees are more committed to the organization.

Many studies have documented that job satisfaction is an important antecedent of organizational commitment (Porter et al., 1974; Mottaz, 1987; Williams & Anderson, 1991; Vanderberg & Lance, 1992; Knoop, 1995; Young, Worchel & Woehr, 1998; Testa, 2001). Affective organizational commitment was found to be more influential with respect to levels of intrinsic and extrinsic job satisfaction. This concurs with other studies of the behavioral outcomes of commitment (Yannis Markovits, Ann J Davis, & Rolf van Dick, 2007).

3. Methods

3.1 Operationalization and Measurements

Job satisfaction was measured by using the Index of Job Satisfaction (Brayfield AH, Rothe HF, 1951) that included 19 items. Organizational commitment was assessed by using the revised version of TCM Employee Commitment Survey (Meyer, Allen, & Smith, 1993) which included 18 items that measure affective, normative, and continuance commitment.

A demographics sheet which included gender, age, years of experience, level of education, and type of position in addition to informational sheet which covered research ethical aspects were also given to subjects. The surveys used a four points scale which represented the degree of agreement or disagreement where (1=strongly disagree, 2=disagree, 3=agree, and 4=strongly agree).

3.2 The Research Question

The attempt of this research was to examine whether or not organizational commitment can be predicted by job satisfaction, gender, age, experience, and position.

3.3 Research Approach, Context, and Subjects

The study was conducted in a private bank during the months of July and August of 2011. The bank is an international global bank headquartered in Manama, Kingdom of Bahrain, and its network spreads over 22 countries worldwide in the region of the Gulf, Asia, and North America. According to the HR manager of the bank surveyed, the bank employs 334 employees. The entire population of employees in all departments was given the survey. Whereas 160 employees refused participating and 18 employees submitted incomplete surveys. The final population surveyed was 156 employees.

3.4 Instrumentation and Scales Reliabilities and Validity

Two instruments were used in this study including the Index of Job Satisfaction (IJS) and the TCM Employee Commitment Survey (TCM). The reliability coefficient for the IJS is 0.77 which was corrected by the Spearman-Brown formula to 0.87. The validity of the individual items is partial, although not crucial, evidence for the validity of the scale. This is an appeal to "face" validity. Additional evidence of a like nature is furnished by the method of constructing the scale. A more rigorous requirement for validation is to use an outside criterion. An attempt was made to provide such a criterion. In the current study, the reliability of the Index of Job Satisfaction Survey reported 0.912.

Perhaps the most systematic attempt to develop an index of job satisfaction was the one made by Hoppock in the early 1930's. The scale evidently has been assumed to have "face" validity. The product-moment correlation between scores on the Hoppock blank 1935 and on the Brayfield-Rothe blank 1951 was 0.92. Although the two blanks were developed by different methods and contain items which over-lap only slightly they give results which are highly correlated. A comparison was made between the means of the Personnel and Non-Personnel groups on the Hoppock blank. The mean for the Personnel group was 22.2 with an S.D. of 2.6; the mean for the Non-Personnel group was 19.2 with an S.D. of 4.0.

The difference between the means is significant at the 1% level; the variances do not differ significantly. Regarding the TCM, several studies have examined its reliability. For example, Allen and Meyer (1990) reported 0.87 for affective, 0.75 for continuance, and 0.79 for normative. Dunham, Grube, and Castaneda (1994) found that alpha range to be between 0.74 and 0.87 for affective, 0.73 to 0.81 for continuance, and 0.67 to 0.78 for normative. Finally, Cohen, 1996 discovered alphas of 0.79 for affective, 0.69 for continuance, and 0.65 for normative. In the current study, the reliability of the TCM Employee Commitment Survey reported 0.884.

The evidence for validity was provided by factor analytic: (a) relations among the commitment measures and related measures; (b) the factor structure of the continuance commitment; and (c) the stability of the factor structures across time.

The patterns of correlation between the commitment measures and other variables also indicated that the validity was established. The measurement was adopted by over 40 employee samples, representing more than 16,000 employees from a wide variety of organizations and occupations (Allen & Meyer, 1996).

3.5 Data Collection Procedure, Analysis, and Ethical Consideration

The surveys were given to the Human Resources manager to give to all employees to complete and all responses were submitted anonymously back to the manager and the only fully answered surveys were taken into consideration discarding those which have some missing data. The data gathered from the surveys were computed using SPSS for interpretation. Descriptive statistics were used to analyze the subjects' demographics while inferential statistics (t-test, ANOVA, and correlation) were used to answer both research questions. For all inferential statistics test, alpha was set at .05.

Finally, the research was conducted in an ethical manner by doing the following: the subjects were not exposed; their anonymity was secured throughout this study; they were fully informed of the associated procedures and risks, as well as they were given their full consent to participate; and they were not forced into participating.

4. Results

4.1 Demographics of Subjects

Out of 156 subjects, 57.1% were males versus 42.9% were females. Subjects' age ranged from 21 and 62 with a mean of 35.3 and a standard deviation of 10.25. However, when sorting the ages into categories, results revealed that 41.7% of the subjects age ranged from 21 and 30, 30.8% ranged from 31 and 40, 17.3% ranged from 41 and 50, and 10.3% exceeded 50. In terms of years of experience, out of 155 subjects, 25.8% of them, their years of experience ranged from 1 and 5, 27% ranged from 6 and 10, 19.3% ranged from 11 and 15, 12.9% ranged from 16 and 20, and 14.8% exceeded 20.

Regarding the level of education, 23% of the subjects had high school or less, 58.95 had a bachelor, 17.3% had a master, and .6% had a doctorate. Finally, with reference to position, 1.9% of the subjects were managers, 5.1% were deputy managers, 27.6% were assistant managers, 22.4% were officers, 14.1% were senior clerks, and 28.8% were clerks.

4.2 The Result of the Multiple Regression Model

According to Table 1, using a Stepwise method, the multiple regression model shows that gender, age, experience, education, and position as predictors of organizational commitment were not statistically significant and therefore, they were excluded from the model. However, Table 1 shows that job satisfaction is statistically significant and accounts for 6.1% of the variance in the level of organizational commitment (adjusted R-square = .061, $p = .001$). Thus, job satisfaction accordingly can be used to predict organizational commitment. Moreover, the prediction equation for this analysis can be written as $\text{organizational commitment} = [27.249 + (.416 * \text{job satisfaction})]$. This means the predicted level of organizational commitment increases as the level of job satisfaction increases ($B = .416$). Furthermore, job satisfaction has a relative importance of ($\text{beta} = .258$, $t = 3.308$, $\text{sig} = .001$) to the predictive model.

5. Discussion and Implications

A multiple regression analysis was used in an attempt to predict the level of organizational commitment by job satisfaction, gender, age, experience, education, and position. A stepwise method was used in the regression model. Based on the results, the regression model revealed only one predictor variable namely job satisfaction (Table 1). Job satisfaction as a predictor variable has accounted for 6.1% in the variance of the predicted level of organizational commitment. Thus, the predicted level of organizational commitment increases as the level of job satisfaction increases ($B = .416$).

According to these findings, organizations ought to place a great emphasize on both organizational commitment and job satisfaction. Given the positive relationship/predictability found in this research between organizational commitment and job satisfaction, organizations now can achieve target levels of both organizational commitment and job satisfaction by simply manipulating one or the other. In other word, improving organizational commitment is contingent upon improving job satisfaction and vice versa. This type of association was found early on by Lincoln and Kalleberg (1990), Mowday, Porter, and Steers (1982), Mueller, Boyer, Price, and Iverson (1994), Williams and Hazer (1986), Vandenberg and Lance (1992), Bhatti and Qureshi (2007), Porter et al.

(1974), Mottaz (1987), Williams and Anderson (1991), Knoop (1995), Young, Worchel, and Woehr (1998), Testa (2001), and Yannis Markovits, Ann J Davis, and Rolf van Dick (2007).

6. Conclusion, Limitations, and Recommendations for Further Study

Among job satisfaction, gender, age, experience, education, and position as predictors of organizational commitment, only job satisfaction was found to be predictor variable. As for the limitations of this study, the generalizability of this study finding 1) may be limited to only this private bank and not be applicable to all private banks in the Kingdom of Bahrain; 2) may not be applicable to government based banks in the Kingdom of Bahrain; and, 3) may not be applicable to the rest of the Gulf region. Finally, to improve the findings validity of this study, 1) other studies should be conducted in other similar private banks in the Kingdom of Bahrain; 2) other studies should be conducted in government based financial institutions in the Kingdom of Bahrain; and, 3) using different instruments to measure both constructs—job satisfaction and organizational commitment.

Table: 1 Multiple Regression Model Using Stepwise Method

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	Job Satisfaction	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

Dependent Variable: Organizational Commitment

Independent Variables: Job Satisfaction, Gender, Age, Experience, Education, Position

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.258*	.067	.061	5.199

*Predictors: (Constant), Job Satisfaction

ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	295.843	1	295.843	10.945	.001*
Residual	4135.706	153	27.031		
Total	4431.548	154			

*Predictors: (Constant), Job Satisfaction

**Dependent Variable: Organizational Commitment

Coefficients***

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	27.249	6.014		4.531	.000
Job Satisfaction	.416	.126	.258	3.308	.001

References

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology*, 63, pp. 1-18.
- Angle, H. L., & Perry, J. L. (1981). "An empirical assessment of organization commitment and organizational effectiveness". *Administrative Science Quarterly*, 26, pp. 1-13.
- Bateman, T. & Strasser, S. (1984). "A longitudinal analysis of the antecedents of organizational commitment". *Academy of Management Journal*, Vol. 21, pp. 95-112.
- Beck, K., & Wilson, C. (2000). Development of affective organizational commitment: Across sequential examination of change with tenure. *Journal of Vocational Behavior*, 56(1), pp. 114–136.
- Benkhoff, B. (1997). Ignoring commitment is costly: New approaches establish the missing link between commitment and performance. *Human Relations*. 50, pp. 701-726.
- Billingsley, B.S., & Cross, L.H. (1992). Predictors of commitment, job satisfaction, and intent to stay in teaching: A comparison of general and special educators. *Journal of Special Education*, 25(4), pp. 453-472.
- Boles, D. B.; Bursk, J. H.; Phillips, J. B. & Perdelwitz, J. R. (2007), Predicting Dual-Task Performance with the Multiple Resources Questionnaire (MRQ). *Human Factors*, 49(1), pp. 32-45.
- employees' point of view. *International Archives of Occupational and Environmental Health*, 82(10), 1249-1259.
- Brayfield, A. H.; and Rothe, H. F. (1951), "An Index of Job Satisfaction", *Journal of Applied Psychology*, 35, pp. 305-311.
- Brewer A (1993) *Managing for Employee Commitment*, Longman, London.
- Brewer, A.M. (1996). Developing commitment between managers and employees. *Journal of Managerial Psychology*, 11(4), pp. 24-34.
- Clark, A. E. (1997). Job Satisfaction and Gender: Why are Women so Happy at Work, *Research in Labor Economics*, 4(4), pp. 341-372.
- Cohen, A. (1993a). Organizational commitment and turnover: A meta-analysis. *Academy of Management Journal*, 36, pp. 1140–1157.
- Cohen, A. & Gattiker, U. E. (1994) Rewards and organizational commitment across structural characteristics: A Meta-analysis, *Journal of Business and Psychology*, 9(2), pp.137-157
- Comm CL, Mathaisel DFX (2000). Assessing employee satisfaction in service firms: An Example in Higher Education. *The Journal of Business and Economic Studies*, 6(1), pp. 43-53.
- Cramer, D. (1993). Tenure, commitment, and satisfaction of college graduates in an engineering firm. *Journal of Social Psychology*, 133(6), pp. 791-797.
- Decottis, T.A. and Summers T.P. (1987). A path analysis of a model of the antecedents and consequences of organizational commitment. *Human Relations*, 40(7), pp. 445-470.
- Dunham, R. B., Grube, J. A. & Castaneda, M. B. (1994). Organizational commitment: the utility of an integrative definition. *Journal of Applied Psychology*, 79, pp. 370-380.
- Eisenberger, R., Fasolo, P., and Davis-LaMastro, V. (1990). Perceived organizational support, employee diligence, commitment, and innovation. *Journal of Applied Psychology*, 75, pp. 51-59.
- Fassina, N.E., Jones, D.A. and Uggerslev, K.L. (2008). Relationship clean-up time: Using meta-analysis and path analysis to clarify relationships among job satisfaction, perceived fairness, and citizenship behaviors. *Journal of Management*, 34(2), pp.161-188.
- Freeman, R. B., (1978). Job Satisfaction as an Economic Variable, *American Economic Review*, 68(2), pp. 135-141.
- George. J.M. and Jones, G.R. (1996). *Understanding and Managing Organizational Behavior*. New York: Addison-Wesley Publishing Co. Inc.
- George, J.M., & Jones, G.R. (2008). *Understanding and Managing Organizational Behavior*. Fifth Edition. Upper Saddle River: New Jersey, Pearson Prentice Hall.
- Hamermesh D.S. (2001). The changing distribution of job satisfaction. *Journal of Human Resources*, 36, pp. 1-30.
- Hamermesh D.S. (1977). *Economic aspects of job satisfaction*, Labor Market Analysis, John Wiley, New York, pp.53-72.
- Hellriegel, D., Slocum Jr., J., and Woodman, R. (1995). *Organizational Behavior*, (7th ed.). West Publishing Company.

- Herzberg, F., Mausner, B., Peterson, R.D. and Capwell, D.F. (1957). *Job attitudes: Review of research and opinions*. Pittsburgh: Psychological Service of Pittsburgh.
- Hoppock, R. (1935). *Job satisfaction*. New York: Harper and Brothers.
- Hirschfield, R. R. (2000). Does revising the intrinsic and extrinsic subscales of the Minnesota Satisfaction Questionnaire short form make a difference? *Educational and Psychological Measurement*, 60, pp.255-270.
- Knoop, R. (1995). Relationships between Job Involvement, Job Satisfaction and Organizational Commitment for Nurses. *Journal of Psychology Interdisciplinary and Applied Psychology*, 129(6), pp. 643-649.
- Koch, J. & Steers, R. (1978). Job attachment, satisfaction, and turnover among public sector employees. *Journal of Vocational Behavior*, 12, pp. 119-128.
- Koopman, P.L., 1991. Between control and commitment: Management and change as the art of balancing. *Leadership and OD Journal*, 12, pp. 3-7.
- Larkey, L. & Morrill, C. (1995). Organisational commitment as a symbolic process. *Western Journal of Communication*, 59(3), pp. 193-214.
- Lee-Kelley, L., Blackman, D. A., & Hurst, J. P. (2007). An exploration of the relationship between learning organizations and the retention of knowledge workers. *The Learning Organization*, 14(3), 204-221.
- Lincoln, J. R., & Kalleberg, A. L. (1990). Culture, control and commitment: A study of work organization and work orientations in the United States and Japan. *Cambridge: Cambridge University Press*.
- Locke, E. A. (1976). *The nature and causes of job satisfaction*. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297-1349). Chicago, IL:
- Rand McNally Lok P. & Crawford J. (1999). The influence of organizational culture, subculture, leadership style and job satisfaction on organizational commitment. *Leadership and Organization Development Journal*. 20 (7), pp. 365-373.
- Loscocco, K.A. (1990). Reactions to blue-collar work: A comparison of women and men. *Work & Occupations*, 17(2), pp. 152-177.
- Luthans, F., Baack, D., & Taylor, L. (1987). Organisational commitment: Analysis of antecedents. *Human Relations*, 40(4), pp. 219-236.
- Mathieu, J.E., & Zajac, D.M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organisational commitment. *Psychological Bulletin*, 108(2), pp.171-194.
- Meyer, J.P. & Allen, N.J. (1991). A Tree-component conceptualization of organizational commitment. *Human Resource Management Review*, 1, pp. 61-89.
- Meyer, N J., & Allen, N. (1997). *Commitment in the Workplace*. Thousand Oaks, CA Sage Publications.
- Mottaz, C.J. (1987). An Analysis of the Relationship between Work Satisfaction and Organizational Commitment. *The Sociological Quarterly*, 28(4), pp. 541-558.
- Mowday, R.T., Porter L.W. and Steers, R.M. (1982). *Employee-Organizational Linkages: The Psychology of Commitment, Absenteeism and Turnover*. New York: Academic Press.
- Mowday, R.T., Steers, R.M. and Porter, L.W. (1979). "The Measurement of Organizational Commitment." *Journal of Vocational Behavior*, 14, pp. 224-247.
- Mueller, C. W., Boyer, E. M., Price, J. L., & Iverson, R. D. (1994). Employee attachment and non-coercive conditions of work: The case of dental hygienists. *Work and Occupations*, 21, pp. 179-212.
- Mueller, C. W., Wallace, J. E., & Price, J. L. (1992). Employee commitment: Resolving some issues. *Work and Occupations*, 19, pp. 211-236.
- Nelson, D. L. & Quick, J.C. (2009). *Organizational Behavior "ORGB"*. Mason: Ohio, South-Western Cengage Learning.
- Porter, L.W., Crampon, W. & Smith, F. (1976). Organizational commitment and managerial turnover: A longitudinal study. *Organizational Behavior and Human Performance*, 15, pp. 87-98.
- Porter, L.W., Steers, R.M, & Mowday, R.T. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59(5), pp. 603-609.
- Price, J. L. (1997). *Handbook of organizational measurement*. Bradford, UK: MCB University Press.
- Robbins, S.P. & Judge, T. A. (2009). *Organizational Behavior*. Thirteenth Edition. Upper Saddle River: New Jersey, Pearson Prentice Hall.

- Ross, C. E., & Reskin, B. F. (1992). Education, control at work and job satisfaction. *Social Science Research, 21*, pp. 134-148.
- Sloane, P, Battu, H. and Seaman, P. (1995). *Over education, Under education and the British Labor Market*. Working Paper 95-09. University of Aberdeen.
- Tanriverdi, H. (2008). Workers' Job Satisfaction and Organizational Commitment: Mediator Variable Relationships of Organizational Commitment Factors. *Journal of American Academy of Business, 14*(1), pp. 152-163.
- Testa, M.R. (2001). Organizational Commitment, Job Satisfaction and Effort in the Service Environment. *Journal of Psychology, 135*(2), pp. 226-236.
- Vandenberg, R.J. and Lance, C.E. (1992). "Examining the Causal Order of Job Satisfaction and Organizational Commitment. *Journal of Management, 18*(1), pp. 153-167.
- Williams, L.J. and Anderson, S.E. (1991). Job Satisfaction and Organizational Commitment as Predictors of Organizational Citizenship and In-role Behaviors. *Journal of Management, 17*(3), pp. 601-617.
- Williams, L.J. and Hazer, J.T. (1986), Antecedents and consequences of satisfaction and commitment in turnover models: a re-analysis using latent variable structural equation methods, *Journal of Applied Psychology, 72* (1), pp. 219-31.
- Yannis Markovits, Ann J Davis, Rolf van Dick. (2007). Organizational Commitment Profiles and Job Satisfaction among Greek Private and Public Sector Employees. *International Journal of Cross Cultural Management, 7*(1), p. 77.
- Young, B.S., Worchel, S. and Woehr, D. (1998). Organizational Commitment among Public Service Employees. *Public Personnel Management, 27*(3), pp. 339-348.