



Influence of Job Satisfaction on Organizational Commitment in Public Universities of Jordan

Mohammad said al-shutafat^a, Bahyah Binti Abdul Halim^b, Hj. Zainudin Awang^c, ^{a,b,c}Faculty of Economics and Management Sciences, University Sultan Zainal Abidin 21300 Kuala Terengganu, Malaysia,

The prime objective of the current study is to investigate the on organizational commitment and the mediating role of Job satisfaction. The Exploratory Factor Analysis test (EFA) is used to analyse the data collected from the survey. The response rate of respondents is obtained using descriptive statistics. The total sample size of this study will be 364 Academic Staff of Jordanian Public Universities. The results of the study highlight that the relationship between organizational commitment and job satisfaction is positive and significant. To test the hypothesis the SEM-AMOS statistical technique was used. The findings of the current study will be helpful for researchers, policymakers, academicians and human resource practitioner in understanding the factors which can be considered while making HR policies for university teaching staff.

Key words: *Job satisfaction, Organizational Commitment, public universities.*



Introduction

Academic staff are considered to be independent professionals and scientific workers (Tschannen-Moran, 2009). Higher education institutions can never prosper in the absence of qualified lecturers (Aslan, Shaukat, Ahmed, Shah & Mahfar, 2014; Esia-Donkoh & Baffoe 2018) and in order to meet the institutional demands, they have to work hard. So their job is more stressful (Saner & Eyüpoglu, 2012b). In order to retain such qualified academic staff, institutions must provide facilities which help in enhancing commitment and satisfaction of staff in their institutions. The success of higher education institutes is linked with the satisfaction and commitment of their academic staff (Saner & Eyupoglu, 2012a). According to Hulpia and Devos (2009) commitment of academics is associated with performance as it helps them to get motivated in dealing with the changes occurring in their surroundings. Being committed to their organization helps organization to gain desired organizational goals. Bogler and Somech (2004) are of the view that organizational commitment is the key ingredient of teacher's performance in academic settings. Academic rankings of world universities (ARWU, 2011) issued a report on the progress of universities of Arab countries. None of the Jordanian universities were mentioned in this report. In order to overcome this problem, there is further need to overlook organizational commitment in Jordan. This will help not only to overcome organizational commitment in academic settings but it will also improve performance of academic institutes. Higher education in Jordan plays an important role in economic development of the country. So, with the passage of time, its demand has increased overtime. Like many other countries, higher education in Jordan has to deal with many challenges. These include internationalization, social changes, economic growth and technological advancement (Weifang, 1999; Tobing, 2016).

Through the research problem, the researchers extracted the following questions:

- Dose emotional intelligence have a significant influence on organizational commitment?
- Does job satisfaction have a significant influence on organizational commitment?

The significance of this research lies in the choosing of the factors to investigate their impact on the organizational commitment of public university in Jordan. Additionally, the use of Structural Equation Modelling (SEM) approach will help to trace the precise relationships that adherence to job satisfaction. The significance of this study lies in the choosing of the mediating factors to investigate their impact on the organizational culture and organizational commitment of public university in Jordan. Additionally, the use of Structural Equation Modelling (SEM) approach will help to trace the precise relationships that adherence to job satisfaction. Furthermore, results of this research will contribute in framing a new vision of



public university in Jordan and strategies for improving emotional intelligence and job satisfaction, to improve and achieve performance enhancement. Further, this study will highlight improvements in the services level to fulfil the needs of clients and workers', through managerial methods to manage the various university activities.

Literature Review

Comprehension of Job satisfaction is viewed as an essential factor for enhancing organizational commitment. Accordingly, a few studies concentrated on the connection between Job satisfaction and organizational commitment. There have been numerous articles about the connection between Job satisfaction and organizational commitment. For instance, Eslami, and Gharakhani, (2012) applied regression analysis to investigate the effect of Job satisfaction on Organizational Commitment. They collected the data from 280 Iranian workers. Their study revealed three elements of Job satisfaction, Personal relationships, Favourable states of work and Promotions; all of which have a constructive and noteworthy effect on Organizational commitment. However, Rehman, et al., (2013) offered a hypothetical model of the unpredictability of relations amongst mentalities and other related factors which clear up the whole story of their interdependencies among the Job Satisfaction and organizational commitment of educators in cutting edge training organizations.

In a Malaysian setting, Ismail and Razak, (2016) assessed the connection between Job satisfaction and organizational commitment in a Fire and Rescue Department. Their research uncovered that job satisfaction was fundamentally linked with organizational commitment, inherent satisfaction was essentially linked with organizational commitment, and outward satisfaction was altogether linked with organizational commitment. Their research, likewise, affirmed inherent satisfaction and extraneous satisfaction may prompt better organizational commitment. A study conducted by Yousef, (2017) studied the direct and indirect associations between, job satisfaction, organizational commitment, and organizational change approaches. The results showed that workers in the examined divisions are tremendously comfortable with the administration and colleagues. Nevertheless, they are only a little bit satisfied with the work environment and work safety. The workers also have slight satisfaction with wage and promotional aspects of the organization. The results also established that personnel in the examined divisions are persistent with their current divisions either willingly or unwillingly. Choi, Cundiff, Kim, and Akhatib, (2018) predicted that job uncertainty and private work–struggles will have a negative influence on job satisfaction and organizational commitment. Their results, from the structural equation models, brought maintenance for the study. From a concrete perspective, the substantial negative associations



among job stressors and innovative behaviour suggested the need to decrease work–family engagements and feelings of job insecurity, in Korean companies, to raise innovation.

Mahmood et al., (2016) states that Organizational Commitment is the attitude of the staff to remain in the organization and concerns efforts to achieve the mission, values and goals of the company. Commitment is the extent to which employees uphold attention, ideas and responsibilities, in the efforts to achieve the company goals. According to Sari et al., (2019), organizational commitment is binding between the individual and an organization; an idea or project that is realized in dedicating itself to achieving the organization's mission. Mahmood et al., (2016) states that organizational commitment reflects the degree in which an individual is tied to an organization. Kim et al. (2016) states that organizational commitment is manifested through strong recognition and engagement of a person, in a particular organization.

Employees who commit to an organization are able to demonstrate an expansion in the viability of the association indicated by the high work performance achievement, job quality, and reduce delays in work, absenteeism, and turnover (Kim et al., 2016; Mahmood et al., 2016; Donkor, 2018). The organizational commitment is the level of trust and acceptance of the workforce to organizational goals. This workforce has a desire to remain in the organization, which in turn is reflected in the statistics of absenteeism as well as in the workforce / turnover statistics.

Luthans (2006) stated that commitment to an organization is: a) a powerful urge to end up an individual of a specific company, b) the urge to endeavour as a coveted organization, and c) a specific trust, and acknowledgment of the qualities and objectives of the organization. As such, organizational commitment is a mentality that mirrors the devotion of workers in the organization and the continuous procedure in which individuals from the company communicated concerns toward the association and the achievement and maintainable of advancement. While Porter characterizes organizational commitment as a power relative of the individual, in distinguishing the inclusion of himself as a member of the association, which is described by three items.

Kim et al. (2016) defines organizational commitment as a feeling of identifying (trust and strong acceptance on the goals and values of the organization), engagement (the willingness to do my best for the sake of the organization) and loyalty (a strong desire to remain a member of the organization) which is expressed by an employee of the organization.



The research above shows that organizational commitment is a disposition of dependability to their association's workforce, and a consistent continuous procedure where the participant organization expressing concern for the organization and its sustained success. Commitment of the workforce can provide a major contribution to the organization because they act towards the success of the organization's goals. Workers who feel attached to the organization, are satisfied to be an individual from the organization, have faith in the organization and look fondly upon the organization, which is manifested in behaviour representing the organization in an environment outside the organization. Further, workers do the best thing for the organization (Mahmood et al., 2016; Eliüsük-bülbül, 2018; Al-Shammari and Al-Am, 2018). Organizational Commitment involves three attitudes: 1) a sense of identification with the goals of the organization, 2) feeling involved in organizational tasks, and 3) a feeling of loyalty towards the organization. Based on the above definition, it can be concluded that, according to the authors understanding, organizational commitment is a degree of feeling which is owned by an employee to be bound by working as an employee for the organization.

Research by Ismail and Razak, (2016) shows that organizational learning culture can be observed as a critical component for worker organizational commitment and job fulfilment. It has also been uncovered that job satisfaction is positively associated with organizational commitment; job satisfaction here serves as a benchmark in deciding the emotional reactions of employees who will affect the commitment of the organization. The staff will be committed to the work place when the job satisfaction of employees is met by the company.

Findings from James Boles et al. (2007), illustrates that job satisfaction is associated with the affective commitment of employees. The aspects of job satisfaction that are used in this study are the promotion, salary, job, and leadership supervision of working groups. Promotion is regarded by employees as a status which confirms their presence at work, so the company should consider the importance of promotion within the company. Salaries can reinforce the commitment to a company; the payment of sufficient salaries shows an appreciation towards employees; if an employee is satisfied with the payment of his/her salary; they will have a strong commitment to the company.

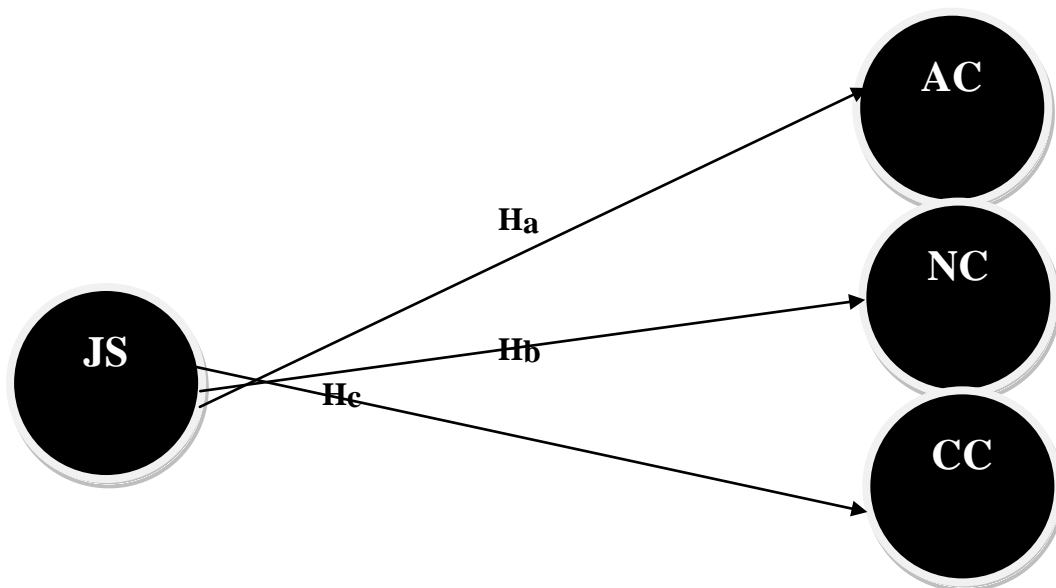
Based on the research that has been disclosed, a research hypothesis can be formulated as follows:

H1: There is a significant relationship between organizational commitment and job satisfaction

H_a: There is a significant relationship between affective commitment (AC) and job satisfaction (JS).

H_b: There is a significant relationship between continuance commitment (CC) and job satisfaction (JS).

H_c: There is a significant relationship between normative commitment (NC) and job satisfaction (JS).



Methodology

Structural Equation Modelling (SEM) may be conducted by using an AMOS program. The SEM technique combines factor analysis, structural models, and path analysis; it will help in giving accurate estimates of the path analysis as well as the relationship between the constructs of the study, to achieve the study objectives. This method is the collection of factor analysis and multiple regression analysis used to test the suggested casual relationship and analyse the structural association among measured variables and latent constructs (unobserved variables). The researchers preferred this approach due to the ability to perform multiple and inter-correlation in a single analysis. The present study determines the multiple variables in the form of indirect paths, path analysis, and predictor variables (Hafeez et al., 2018). The questionnaire is designed by including ratio and interval scales as well as adding the measures of constructs, both conceptual and hypothetical in nature. For instance, the selection of SEM was inevitable for the present study. Moreover, it also helps to observe the causal relationship among the variables and highlights the unobserved variables and complexity in the analysis.

Table 1 shows the total number of academic staff for each of the academic staff. For the Exploratory Factor Analysis test, members from Jordanian public universities are considered the population in this study. Since it was practical to conduct a survey on all the ten public universities, all universities were chosen. (AL-Hussein Bin Talal ,Tafila Technical University,Mu'tah University, The University of Jordan,German Jordanian University,AL-Balqa Applied University The Hashemite University and Yarmouk University,Jordan University of Science & Technology,Al albayt University) . Thus, the total population for this study was 5754.

Table 1: Distribution of public universities in Jordan

University	Year (2017-2018) Number of acadmic staff
Yarmouk University	852
Jordan University of Science & Technology	753
Al albayt University	299
The University of Jordan	1181
The Hashemite University	484
AL-Balqa Applied University	1045
German Jordanian University	161
Mutah University	520
AL-Hussein Bin Talal University	222
Tafila Technical University	237
Total	5754

The total sample size of this study will be 364 Academic Staff, of Jordanian Public Universities. This sample size (364) was determined using the Krejcie and Morgan sample size determination table (Krejcie & Morgan, 1970). From the table, the sample of the population of 5645 Academic Staff of Jordanian Public Universities is 364. So, there are 364 respondents appropriated in this study.

Data Analysis

Data analysis indicates how the data collected will be analysed by the researchers. Data was evaluated by employing convenient analytical software in order to test every components of the data. This process also includes checking the data, sharpening and transforming the data with an aim to find out meaningful information that will propose implications and support

decision makers; also it includes the explanation of the research findings in the research questions.

Exploratory Factor Analysis test

This construct has 20 items in a questionnaire. The EFA results in Table 2 show the descriptive statistics for every item measuring Job Satisfaction. This construct was measured using 20 items in a questionnaire with the interval scale from 1 (strongly disagree) to 10 (strongly agree) with the given item statement (Awang et al., 2016; Hoque et al., 2018). The mean and standard deviation score for every item is presented in Table 2.

Table 2: The mean and standard deviation for items measuring Job Satisfaction

Descriptive Statistics				
No	Item	Statement	Mean	Std. Deviation ^a
1	PR1	The department's board is obliged to distribute the supervision of the scientific messages	9.04	1.031
2	PR2	My work gives me a feeling of personal accomplishment	9.07	.869
3	PR3	How satisfied are you with the information you receive from management on what is going on in your division	8.82	.857
4	PR4	How satisfied are you with your involvement in decisions that affect your work	9.09	.878
5	PR5	Considering everything, how satisfied are you with your job	8.90	.893
6	PR6	When I do my work well, it gives me a feeling of accomplishment	8.95	.852
7	PR7	The current system of promotions is suitable for faculty members	8.78	.973
8	GP1	The current system of promotions urges collective action in a single research	9.26	.758
9	GP2	Jobs in the academic field are available	8.80	.919
10	GP3	I feel that opportunities for career advancement are available	8.70	.952
11	GP4	There is justice in obtaining the promotion	8.76	.852
12	GP5	I am satisfied with my rewards and incentives	8.93	.805

13	GP6	The chances of promotion on the criteria are clear	8.99	.802
14	GP7	Get financial support for research and studies	9.24	.862
15	FW1	I feel independent at work	8.89	.875
16	FW2	Doing my work brings me a sense of achievement and gaining experience	8.77	.885
17	FW3	I clearly feel my responsibilities at work	8.90	.821
18	FW4	The number of students in the courses I am teaching is suitable	8.96	.826
19	FW5	The number of credit hours I am teaching is suitable	8.80	.845
20	FW6	The rooms and laboratories are well equipped	9.07	.802

a. For each variable, missing values are replaced with the variable mean.

The results in Table 2 indicate that the Bartlett's Test of Sphericity is significant (P-Value < 0.05).

Table 3: The KMO and Bartlett's Test Score

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.893
Bartlett's Test of Sphericity	Approx. Chi-Square	2497.245
	df	190
	Sig.	0.000

The results in Table 3 show that there are three dimensions or components emerged from the EFA procedure based on the computed Eigen value greater than 1.0. The Eigen values ranged between 3.990 and 4.758. The variance explained for component 1 is 23.792%, component 2 is 21.213%, and component 3 is 19.949%. Thus, the total variance explained for measuring this construct is 64.954%. The total variance explained is acceptable since it exceed the minimum 60% (Awang, 2010; Noor et al., 2015; Hoque and Awang, 2016; Hoque et al., 2017, 2018; and Yahaya et al., 2018).

Table 4: The Total Variance Explained

Total Variance Explained			
Component	Rotation Sums of Squared Loadings		
	Eigen value	% of Variance	Cumulative %
1	4.758	23.792	23.792
2	4.243	21.213	45.005
3	3.990	19.949	64.954

Extraction Method: Principal Component Analysis.

Table 4 presents the three dimensions or components emerged and their respective items resulted from the EFA procedure. The factor loading for every item should be greater than 0.6 in order to be retained (Awang, 2012; and Yahaya et al., 2018). Thus, a few items from each component need to be deleted since they failed to achieve the minimum requirement for factor loading of 0.6 (Awang, 2015, Noor et al., 2015; Awang et al., 2016; Hoque et al., 2017; Yahaya et al., 2018).

The value of Cronbach's Alpha should be greater than 0.7 for the items to achieve the Internal Reliability (Awang, 2012). Table 6 presented the Cronbach Alpha for each component.

Table 5: The Internal Reliability for the Construct

Reliability Statistics		
Component	N of Items	Cronbach's Alpha
1	7	0.920
2	7	0.887
3	6	0.895

This construct has 18 items in a questionnaire. The EFA results in Table 6 show the descriptive statistics for every item measuring Organizational Commitment. This construct was measured using 18 items in a questionnaire with the interval scale from 1 (strongly disagree) to 10 (strongly agree) with the given item statement (Awang et al., 2016; Hoque et al., 2018). The mean and standard deviation score for every item is presented in Table 6.

Table 6: The mean and standard deviation for items measuring Organizational Commitment

No	Item	Mean	Std. Deviation
1	AC1	9.26	.758
2	AC2	8.80	.919
3	AC3	8.70	.952
4	AC4	8.76	.852
5	AC5	8.93	.805
6	AC6	8.99	.802
7	CC1	8.53	.961
8	CC2	8.45	.906
9	CC3	8.69	.985
10	CC4	8.62	.794

11	CC5	8.82	.851
12	CC6	8.92	.963
13	NC1	8.89	.875
14	NC2	8.77	.885
15	NC3	8.90	.821
16	NC4	8.96	.826
17	NC5	8.80	.845
18	NC6	9.07	.802

The results in Table 17 indicate that the Bartlett's Test of Sphericity is significant (P-Value < 0.05).

Table 7: The KMO and Bartlett's Test Score

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.871
Bartlett's Test of Sphericity	Approx. Chi-Square	2297.266
	df	190
	Sig.	0.000

Table 8 presented the Cronbach Alpha for each component.

Table 8: The Internal Reliability for the Construct

Reliability Statistics		
Component	N of Items	Cronbach's Alpha
1	6	0.876
2	6	0.897
3	6	0.895

Confirmatory factor analysis

Confirmatory factor analysis is performed on the endogenous and exogenous variables, and on the individual constructs. Afterwards, the model is measured using combined variables. The measurement model involves four endogenous and five exogenous variables namely green purchase intention, environmental consciousness, perceived behavioural control, and green trust and government regulations, perceived green value, perceived green knowledge, green availability, and green price sensitivity. After undergoing the Confirmatory factor analysis, the goodness of fit is estimated resulting in following indices: $\chi^2= 205.3$, degrees of

freedom=173, CFI=0.993, Ratio=1.187, GFI= 0.959, PNFI= 0.715, TLI= 0.990, RMSEA=0.21 with $p=0.047$. Therefore, the estimates show the models' compatibility with the data as all the indices are in accordance with the acceptable thresholds. The discriminant validity of the model is discovered using average variance extracted and correlation analysis. The measured values of AVE for two variables must be higher than the square of correlation values between the constructs. In order to check the indirect effect, bootstrapping is employed.

Table 9: The Composite reliability and discriminant Validity

	CR	AVE	NC	AC	CC	JS
NC	0.915	0.812	0.948			
AC	0.895	0.772	0.731	0.798		
CC	0.932	0.617	0.518	0.55	0.801	
JS	0.832	0.802	0.508	0.501	0.501	0.931

Regression Analysis

The next stage is the assessment of the structural model after ascertaining the measurement model in the present study. The procedure for the bootstrapping through a number of 5000 bootstrap samples and 331 cases to assess the significance of the path coefficients was applied. Structural model, according to (Basheer et al., 2019; Hafeez et al., 2018), illustrates about the reliance and dependence of relationships in the hypothesized model. In partial least squares (PLS), structural model takes before the directional relationships between the variables, their t-values and the path co-efficient. The PLS approach is similar to the standardized beta coefficient estimated in the regression analysis (Hameed et al., 2018) This research study has highlighted the model of evaluation. After this, the hypotheses have been tested for finding the correlation among the variables.

Table 10: Direct Effect

	(β)	SD	T-value	P-Values
H_a	0.321	0.178	3.321	0.000
H_b	0.342	0.165	3.234	0.000
H_c	0.453	0.187	3.768	0.000



Discussion

The fourth objective of the current research is to examine the impact of Job satisfaction on organizational Commitment. The results of the research indicate that Job satisfaction has a positive effect on organizational Commitment at ($\beta = .128$, $CR = 2.001$, $p = 0.045$). Hence, H2 is supported. The findings of the research are providing support to the hypothesized results. The results of the current study indicate that Job satisfaction is one of the important determinants and there is a strong association between organizational commitments. Personal relationships, favourable states of work and Promotions have a constructive and noteworthy effect on Organizational commitment (Eslami, and Gharakhani, 2012). All factors of emotional intelligence, service 0.65, optimism 0.66, social assessment 0.77 and self-assessment 0.72, completely standardized loading were statistically significant ($p < .001$) and varied in magnitude from .65 to .77. Similarly, all factors of organizational commitment. Similarly, affirmative 1.34, confirmative 0.67 and normative 0.65 completely standardized loading were statistically significant ($p < .001$) and varied in magnitude from .65 to 1.34.

Results of factor loadings provided evidence in supporting that there was a high dependability in the relationship of the latent variable to their indicators. The research discovered that Jordanian university lecturer job satisfaction has been enhancing organizational commitment. Research has shown that a wide-ranging and fruitful academic situation results in enhanced intellectual individuals and job satisfaction. Equally, Lecturers have the strong relation with university administration. In this work environment, lecturers engage in performing tasks. They have equal chances to be promoted. So, their satisfaction is leading to commitment with the universities; they are too satisfied to leave the organizations. They believe that if they intend to leave then their career might not flourish. Further, the results of the research are providing support to the social exchange theory (Eslami, and Gharakhani, (2012)) and are consistent with the prior findings of Christie et al. (2015: Igbinovia & Popoola 2016: Gelfand et al., 2017: Jyoti & Kour, 2017: Altındağ, & Köseadağı, 2015). The social exchange theory presumes that the person's organizational commitment is contingent upon his or her perceived equilibrium of remuneration benefits over involvement utilities (Rasoolimanesh, Jaafar, Kock, & Ramayah, 2015; Misrah, Patnaik and Misrah, 2016). This approach highlights the existing exchange relationship between organizations and individuals. The more satisfactory the exchange, from the members' perspective, the better their commitment to achieving the organizational objectives (Top, Akdere, & Tarcan, 2015). Similarly, the findings of this study approve the findings of Mohamad, khani, and Lalardi (2012) that made a connection between job satisfaction and organizational commitment among the lecturers in Tehran. So, the positive relationship between job satisfaction and organizational commitment among university lecturers has been matched with the previous



study of Rehman, et al., (2013). Further, another study conducted by Igbinoia and Popoola (2016), explored job satisfaction and organizational commitment as determinants of job performance amongst lecturers in Nigeria. The authors gathered data from library employees. So the current study also confirms that the relationship is positive between job satisfaction and organizational commitment of university lecturers. Furthermore, the current study also confirms the positive relationship between job satisfaction and organizational commitment among university lecturers. This study complements the study done by Teh and Laosirihongthong (2011) that studied the effect of job satisfaction and organizational commitment and also investigated the mediating role of multicultural change in the association between and work routine. The study gathered data from a sample of employees working with banks in Switzerland.

Conclusion

This study was conducted to assess such topics as the effect of organizational commitment in the presence of job satisfaction of Jordanian University academic staff. This study is assumed to represent academic staff' beliefs about university commitment. The commitment of the universities is formed through an inter action of beliefs, experiences, and already existing elements. An individual is slowly shaped in order to fit into the existing commitment. The commitment truly displays how things are done. Based on the commitment strength, the universities have a clear vision, a widely shared philosophy, strong values, high standards for performance, rules for behaviour, etc. A significant and positive relationship was found in this study between commitment and job satisfaction, in the education sector. The commitment has qualities that include being warm and caring, loyal, and is linked with innovation and development. Commitment has long been the focus of business leaders and organizational scholars due to the belief that employees with organizational commitment are much more productive and less likely to leave an organization. Together, given the frameworks of interest in this study, relationships between the universities commitment suggests lecturers' belief that they work in a family-like atmosphere and experience a sense of community. The occurrence of studies in higher education indicating such a relationship is sparse. This paper also investigated the mediating role of job satisfaction on university culture and commitment and found that organizational commitment is considered to be antecedent to job satisfaction. Moreover, based on the model of this study, the model proposed that job satisfaction is causally an antecedent of organizational commitment and culture. The model further assumes that a supportive culture produces higher job satisfaction and higher job satisfaction produces higher organizational commitment, among academic staff of the public sector universities of Jordan.



Recommendations

Studies suggest a link between job satisfaction and commitments to an institution. This study reaffirmed the research to an extent and also supplemented research by providing data on the underlying dimension of organizational culture and organizational commitment. Given the results of the academic staff search and the findings from this study, several recommendations can be made for further studies. On the other hand, different conceptualizations of organizational commitment may have quite different implications for on-the-job behaviour. Hence behavioural outcomes previously selected for study may or may not accurately reflect the ways academic staff express commitment. Further, some participants may have felt that the survey items were not precisely applicable to their environments, as organizations are becoming increasingly diverse in terms of culture. Lastly, it is important to have the correct method and instrument because they provide important information about the theories under study.



REFERENCES

- Al-Shammari, M., & Al-Am, Z. (2018). Organizational culture and job satisfaction in a telecommunications company in the Kingdom of Bahrain. *Polish Journal of Management Studies*, 18(1), 33-43.
- ARWU. 2011. Academic Ranking of World Universities, Available at: <http://www.shanghairanking.com/ARWU-2011-Press-Release.html>.
- Aslan, A. S., Shaukat, M. Z., Ahmed, I., Shah, I. M., & Mahfar, M. (2014). Job satisfactions of academics in Malaysian public universities. *Procedia-Social and Behavioral Sciences*, 114, 154-158.
- Awang, Z. (2010). *Research Methodology for Business and Social Sciences*. Universiti Teknologi MARA. Malaysia
- Awang, Z. (2012). *Research methodology and data analysis*. Penerbit Universiti Teknologi MARA Press. Malaysia.
- Awang, Z. (2014). A handbook on SEM for academicians and practitioners: the step by step practical guides for the beginners. *Bandar Baru Bangi, MPWS Rich Resources*.
- Awang, Z., Afthanorhan, A., & Mamat, M. (2016). The Likert scale analysis using parametric based Structural Equation Modeling (SEM). *Computational Methods in Social Sciences*, 4(1), 13-21.
- Basheer, M., Siam, M., Awn, A., & Hassan, S. (2019). Exploring the role of TQM and supply chain practices for firm supply performance in the presence of information technology capabilities and supply chain technology adoption: A case of textile firms in Pakistan. *Uncertain Supply Chain Management*, 7(2), 275-288.
- Bogler, R., & Somech, A. (2004). Influence of teacher empowerment on teachers' organizational commitment, professional commitment and organizational citizenship behavior in schools. *Teaching and teacher education*, 20(3), 277-289.
- Choi, s. B., cundiff, n., kim, k., & akhatib, s. N. (2018). The effect of work-family conflict and job insecurity on innovative behaviour of korean workers: the mediating role of organisational commitment and job satisfaction. *International Journal of Innovation Management*, 1850003.



- Donkor, A. K. (2018). Parent's Commitment is the Gateway to a Child's Academic Success. *International Journal of Educational Technology and Learning*, 2(1), 25-31.
- Eliüsük-bülbul, A. (2018). The Effect of Gratitude Training Program on the Gratitude Levels of University Students. *Journal of Education and e-Learning Research*, 5(2), 86-90.
- Esia-Donkoh, K., & Baffoe, S. (2018). Instructional Supervisory Practices of Headteachers and Teacher Motivation in Public Basic Schools in Anomabo Education Circuit. *Journal of Education and e-Learning Research*, 5(1), 43-50.
- Eslami, J., & Gharakhani, D. (2012). Organizational commitment and job satisfaction. *ARNP Journal of Science and Technology*, 2(2), 85-91.
- Hafeez, M. H., Basheer, M. F., Rafique, M., & Siddiqui, S. H. (2018). Exploring the Links between TQM Practices, Business Innovativeness and Firm Performance: An Emerging Market Perspective. *Pakistan Journal of Social Sciences (PJSS)*, 38(2).
- Hameed, W. U., Basheer, M. F., Iqbal, J., Anwar, A., & Ahmad, H. K. (2018). Determinants of Firm's open innovation performance and the role of R & D department: an empirical evidence from Malaysian SME's. *Journal of Global Entrepreneurship Research*, 8(1), 29.
- Hoque, A. S. M. M., Siddiqui, B. A., Awang, Z. B., & Baharu, S. M. A. T. (2018). Exploratory Factor Analysis of Entrepreneurial Orientation in the Context of Bangladesh Small and Medium Enterprises (SMES). *European Journal of Management and Marketing Studies*.
- Hulpia, H., Devos, G., & Rosseel, Y. (2009). The relationship between the perception of distributed leadership in secondary schools and teachers' and teacher leaders' job satisfaction and organizational commitment. *School Effectiveness and School Improvement*, 20(3), 291-317.
- Ismail, A., & Razak, M. R. A. (2016). Effect Of Job Satisfaction On Organizational Commitment. *Management and Marketing Journal*, 14(1), 25-40.
- Kim, K. Y., Eisenberger, R., & Baik, K. (2016). Perceived organizational support and affective organizational commitment: Moderating influence of perceived organizational competence. *Journal of Organizational Behavior*, 37(4), 558-583.



- Krejcie, R. V, & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 38(1), 607–610. <http://doi.org/10.1177/001316447003000308>.
- Kumar, B. P., & Giri, V. N. (2009). Examining the relationship of organizational communication and job satisfaction in Indian organizations. *Journal of Creative Communications*, 4(3), 177-184.
- Mahmood, A., Hussan, S. G., Sarfraz, M., Abdullah, M. I., & Basheer, M. F. (2016). Rewards satisfaction, perception about social status and commitment of nurses in Pakistan. *European Online Journal of Natural and Social Sciences*, 5(4), pp-1049.
- Mishra, U. S., Patnaik, S., & Mishra, B. B. (2016). Augmenting human potential at work: an investigation on the role of self-efficacy in workforce commitment and job satisfaction. *Polish Journal of Management Studies*, 13(1), 134-144.
- Rehman, K., Rehman, Z., Saif, N., Khan, A. S., Nawaz, A., & Rehman, S. (2013). Impacts of job satisfaction on organizational commitment: a theoretical model for academicians in HEI of developing countries like Pakistan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(1), 80-89.
- Saner, T., & Eyüpoğlu, Ş. Z. (2012). The age and job satisfaction relationship in higher education. *Procedia-Social and Behavioral Sciences*, 55, 1020-1026.
- Sari, M., Nasution, M. I., & Wahyuni, S. F. (2019). The strategy of Spiritual Leadership: The Role of Spiritual Survival, Workplace Spirituality and Organizational Commitment at Private Universities. *International Journal of Research in Business and Social Science*, 8(1), 64-72.
- Teh, P. L., & Laosirihongthong, T. (2011, September). Job involvement, job satisfaction, and organizational commitment: Predicting propensity to leave a job among skilled employee. In *Quality and Reliability (ICQR), 2011 IEEE International Conference on* (pp. 1-5). IEEE.
- Tobing, D. S. K. (2016). The effect of compensation, career development, work-family support on job satisfaction. *Polish Journal of Management Studies*, 14(1), 206-213.
- Tschannen-Moran, M. (2009). Fostering teacher professionalism in schools: The role of leadership orientation and trust. *Educational Administration Quarterly*, 45(2), 217-247.



- Weifang, M. (1999). Global challenges and Chinese responses. In P. G. Altbach & P. M. Peterson (Eds.). *Higher education in the 21 Century: Global challenge and national response* (pp. 11-17). Annapolis Junction, MD: Institute of International Education.
- Yahaya, T., Idris, K., Suandi, T., & Ismail, I. (2018). Adapting instruments and modifying statements: The confirmation method for the inventory and model for information sharing behavior using social media. *Management Science Letters*, 8(5), 271-282.
- Yusof, Y., Awang, Z., Jusoff, K., & Ibrahim, Y. (2017). The influence of green practices by non-green hotels on customer satisfaction and loyalty in hotel and tourism industry. *International Journal of Green Economics*, 11(1), 1-14.