



UNIVERSITI PUTRA MALAYSIA

***MEDIATION EFFECT OF JOB SATISFACTION ON RELATIONSHIP
BETWEEN LEARNING ORGANIZATION AND ORGANIZATIONAL
COMMITMENT AMONG LECTURERS IN HIGHER EDUCATION
INSTITUTIONS***

WANG GUIXIA

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By

WANG GUIXIA

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in
Fulfilment of the Requirements for the Degree of Doctor of Philosophy**

January 2022

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

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January 2022

Chairman : Associate Professor Abdullah Mat Rashid, PhD
Faculty : Educational studies

Organizational commitment reflects the self-identification of lecturers within HEI, it has far-reaching implications on multifarious aspects in the organization. The low level of organizational commitment of lecturers continues to remain as one of the key issues faced by many higher education institutions (HEI) in China. This is reflected by the serious shortage of lecturers in China, let alone qualified lecturers to cope with the surging number of HEI. Findings from past research on the relationship of the learning organization, job satisfaction, and organizational commitment were not in the context of Chinese lecturers in Heilongjiang province. Thus, this study was conducted to study mediating role effects of the relationship between job satisfaction and organizational commitment among lecturers in HEI in Heilongjiang province, China.

This study utilized a correlational research design with multi-stage cluster sampling. The respondents were 452 lecturers from across 10 different HEIs. The self-administered questionnaire measure Learning Organization, Job Satisfaction and Organizational Commitment. The learning organization questionnaire adopted from Yang et al. (2004) has seven dimensions, job satisfaction questionnaire adopted from Spector (1997) has nine dimensions and organizational commitment questionnaire adopted from Meyer and Allen (1991) has three dimensions. All these instruments were found to have good content validity and reliability scores.

Data were analysed with descriptive statistics, bivariate correlation and Structural Equation Modelling (SEM). The findings show that the level of all the dimensions of the learning organization, job satisfaction, and organizational commitment was at a moderate level. Zero-order correlations show that most of the dimensions of the learning

organization, job satisfaction, and organizational commitment were positively correlated. From the SEM conducted, it is found that job satisfaction significantly mediates the impact of learning organization on organizational commitment, specifically Continuous learning, Connection, and Strategic leadership. Job satisfaction is also found to be a stronger predictor of organizational commitment than learning organization.

The research implication strengthens the existing theory and models of the learning organization, job satisfaction and organizational commitment. In this study, there are several practical implications for the various parties involved, the education administration team of HEI, training institutions, and the Ministry of Education. This study has clearly shown that both job satisfaction and learning organization in the HEI are pivotal to elevating the lecturer's organizational commitment.



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Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**KEPUASAN KERJA SEBAGAI MEDIATOR ANTARA ORGANISASI
PEMBELAJAR DAN KOMITMEN ORGANISASI DI INSTITUSI PENGAJIAN
TINGGI**

Oleh

WANG GUIXIA

Januari 2022

Pengerusi : Profesor Madya Abdullah Mat Rashid, PhD
Fakulti : Pengajian Pendidikan

Komitmen organisasi memaparkan identiti pekerja dalam organisasi dan merupakan isu penting dalam menentukan pelbagai aspek dalam organisasi tersebut. Tahap komitmen organisasi pensyarah yang rendah terus kekal sebagai salah satu isu utama yang dihadapi oleh banyak institusi pengajian tinggi (IPT) di China. Ini dicerminkan oleh kekurangan tenaga pengajar di China, apatah lagi pensyarah yang berkecukupan untuk menghadapi peningkatan bilangan IPT. Penyelidikan lepas tentang hubungan organisasi pembelajar, kepuasan kerja dan komitmen organisasi adalah amat kurang di negara China, terutamanya dalam kalangan pensyarah dari wilayah Heilongjiang. Justeru, kajian ini dijalankan untuk mengkaji peranan kepuasan kerja sebagai mediator dalam hubungan antara organisasi pembelajar dan komitmen organisasi.

Kajian ini merupakan kajian bentuk korelasi dan menggunakan persampelan kluster pelbagai peringkat. Responden adalah seramai 452 orang pensyarah dari 10 IPT yang berbeza. Soal selidik yang ditadbir sendiri menggunakan tiga instrumen, organisasi pembelajar direka oleh Yang et al. (2004) yang mempunyai tujuh dimensi, kepuasan kerja direka oleh Spector (1997) yang mempunyai sembilan dimensi dan komitmen organisasi direka oleh Meyer dan Allen (1991) yang mempunyai tiga dimensi. Kesemua instrumen ini didapati mempunyai skor kesahan dan kebolehpercayaan kandungan yang baik.

Data dianalisis dengan deskriptif, korelasi bivariat, dan ujian SEM. Dapatan kajian menunjukkan tahap semua dimensi organisasi pembelajaran, kepuasan kerja dan komitmen organisasi berada pada tahap sederhana. Kolerasi tertib sifar menunjukkan bahawa kebanyakan dimensi organisasi pembelajar, kepuasan kerja dan komitmen organisasi adalah berkorelasi positif. Pemodelan persamaan struktur yang dijalankan,

didapati kepuasan kerja memainkan peranan mediator dalam hubungan antara organisasi pembelajar dan komitmen organisasi, khususnya dalam pembelajaran berterusan, hubungan dan kepimpinan strategik. Kepuasan kerja juga memberi kesan kepada komitmen organisasi lebih daripada organisasi pembelajar.

Implikasi kajian ini mengukuhkan teori dan model sedia ada dalam organisasi pembelajar, kepuasan kerja dan komitmen organisasi. Dalam kajian ini, terdapat beberapa implikasi praktikal kepada pelbagai pihak yang berkenaan seperti pihak pentadbiran pendidikan IPT, maktab perguruan dan Kementerian Pendidikan. Kajian ini jelas menunjukkan bahawa kepuasan kerja dan organisasi pembelajar di IPT adalah penting untuk meningkatkan komitmen organisasi pensyarah.



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This thesis was submitted to the Senate of the Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

Abdullah bin Mat Rashid @ Mat Idris, PhD

Associate Professor
Faculty of Educational Studies
Universiti Putra Malaysia
(Chairman)

Soaib bin Asimiran, PhD

Associate Professor
Faculty of Educational Studies,
Universiti Putra Malaysia
(Member)

Arnida binti Abdullah, PhD

Senior Lecturer
Faculty of Educational Studies,
Universiti Putra Malaysia
(Member)

ZALILAH MOHD SHARIFF, PhD

Professor and Dean
School of Graduate Studies
Universiti Putra Malaysia

Date: 19 May 2022

Declaration by Members of Supervisory Committee

This is to confirm that:

- the research and the writing of this thesis were done under our supervision;
- supervisory responsibilities as stated in the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2015-2016) are adhered to.

Signature: _____

Name of Chairman
of Supervisory

Committee: Associate Professor Dr. Abdullah bin Mat Rashid @ Mat Idris

Signature: _____

Name of Member
of Supervisory

Committee: Associate Professor Dr. Soaib bin Asimiran

Signature: _____

Name of Member
of Supervisory

Committee: Dr. Arnida binti Abdullah

TABLE OF CONTENTS

		Page
ABSTRACT		i
ABSTRAK		iii
ACKNOWLEDGEMENTS		v
APPROVAL		vi
DECLARATION		viii
LIST OF TABLES		xiv
LIST OF FIGURES		xvi
LIST OF APPENDICES		xvii
LIST OF ABBREVIATIONS		xviii
CHAPTER		
1	INTRODUCTION	1
	1.1 Preamble	1
	1.2 Background of the study	1
	1.3 Problem statement	3
	1.4 Research objectives	5
	1.5 Research hypotheses	5
	1.6 Significance of the study	6
	1.7 Scope of the study	7
	1.8 Assumptions	8
	1.9 Definitions of terminology	9
	1.9.1 Organizational commitment	9
	1.9.1.1 Affective commitment	9
	1.9.1.2 Continuance commitment	9
	1.9.1.3 Normative commitment	10
	1.9.2 Learning organization	10
	1.9.2.1 Continuous learning	10
	1.9.2.2 Inquiry and dialogue	10
	1.9.2.3 Collaboration and team learning	11
	1.9.2.4 Systems	11
	1.9.2.5 Empowerment	11
	1.9.2.6 Connection	11
	1.9.2.7 Strategic leadership	11
	1.9.3 Job satisfaction	12
	1.9.4 Higher Educational Institution (HEI)	12
	1.9.5 Gender	13
	1.9.6 Professional life cycle	13
 2	LITERATURE REVIEW	 14
	2.1 Introduction	14
	2.2 Organizational commitment	14
	2.2.1 Historical overview of organizational commitment	14

2.3	Learning organization	17
2.3.1	Conceptualization of learning organization	17
2.3.2	Areas of learning organization	19
2.3.3	Mechanism of learning organization	22
2.3.4	Importance of learning organization	25
2.4	Job satisfaction	26
2.4.1	Understanding job satisfaction	26
2.4.2	Mechanism of job satisfaction	27
2.4.3	Factors related to job satisfaction	29
2.5	Related theories	30
2.5.1	Learning Organization Framework	30
2.5.2	Two-factor theory of job satisfaction	34
2.5.3	Three component model of organizational commitment	36
2.5.4	Job Characteristics Model	37
2.6	Theoretical framework	38
2.7	Proposed conceptual framework	41
2.8	Relationship between research variables	42
2.8.1	Job satisfaction as mediator between learning organization and organizational commitment	49
3	METHODOLOGY	51
3.1	Introduction	51
3.2	Research design	51
3.3	Population and sample	51
3.4	Sampling procedure	53
3.5	Description of the instrument	55
3.5.1	Section A	56
3.5.2	Section B	57
3.5.3	Section C	58
3.5.4	Section D	59
3.6	Validity and reliability	59
3.6.1	Validity	60
3.6.2	Reliability	60
3.7	Statistical analysis	62
3.7.1	Objective 1	63
3.7.2	Objective 2	63
3.7.3	Objective 3	64
3.7.4	Objective 4	64
3.8	Preliminary data screening	65
3.8.1	Response rate and missing values	65
3.8.2	Outliers	65
3.8.3	Normality and Multicollinearity	66
4	FINDINGS AND DISCUSSION	68
4.1	Introduction	68
4.2	Profile of the respondents	68
4.3	Research Objective 1: Level of learning organization, job satisfaction and organizational commitment	70

4.3.1	Learning organization	70
4.3.1.1	Findings on the level of learning organization	70
4.3.1.2	Discussions on the level of learning organization	73
4.3.2	Job satisfaction	73
4.3.2.1	Findings on the level of job satisfaction	73
4.3.2.2	Discussions on the level of job satisfaction	74
4.3.3	Organizational commitment	75
4.3.3.1	Findings on the level of organizational commitment	75
4.3.3.2	Discussions on the level of organizational commitment	77
4.4	Research Objective 2: Relationship between dimensions of learning organization, job satisfaction and organizational commitment	78
4.4.1	Finding on the Relationship between dimensions of learning organization and organizational commitment	78
4.4.1.1	Findings and discussion on the relationship between Continuous learning and organizational commitment	79
4.4.1.2	Findings and discussion on relationship between Inquiry and dialogue and organizational commitment	81
4.4.1.3	Findings and discussion on relationship between collaboration and team learning and organizational commitment	82
4.4.1.4	Findings and discussion on relationship between systems and organizational commitment	83
4.4.1.5	Findings and discussion on relationship between empowerment and organizational commitment	84
4.4.1.6	Findings and discussion on the relationship between connection and organizational commitment	86
4.4.1.7	Findings and discussion on the relationship between strategic leadership and organizational commitment	87
4.4.2	Findings and discussions on the relationship between job satisfaction and organizational commitment	89

4.5	Research Objective 3: Role of job satisfaction as mediator between dimensions of learning organization and organizational commitment	91
4.5.1	Findings on Job satisfaction plays a mediating role in the relationship between dimension learning organization and organizational commitment	91
4.5.2	Discussions on job satisfaction plays a mediating role in the relationship between dimension learning organization and organizational commitment.	93
4.6	Research Objective 4: the extent of learning organization and job satisfaction in explaining organization commitment	94
4.6.1	Findings on learning organization and job satisfaction in explaining organizational commitment	94
4.6.2	Discussions on learning organization and job satisfaction in explaining organizational commitment	96
5	SUMMARY, CONCLUSION, IMPLICATION, AND RECOMMENDATIONS	98
5.1	Introduction	98
5.2	Summary	98
5.3	Conclusion	100
5.4	Implication	103
5.4.1	Theoretical implications	103
5.4.2	Practical implications	105
	5.4.2.1 Promote continuous learning at individual level	105
	5.4.2.2 Promote continuous learning at organizational level	107
	5.4.2.3 Promote job satisfaction	108
5.5	Recommendations	109
	5.5.1 Recommendations for practice	109
	5.5.2 Recommendation for research	112
	REFERENCES	114
	APPENDICES	142
	BIODATA OF STUDENT	172
	LIST OF PUBLICATIONS	173

LIST OF TABLES

Table	Page
2.1 Differences between organizational learning and learning organization	19
2.2 Similarities in Fifth discipline and Learning organization framework	22
2.3 Bateson's levels of learning	23
2.4 Differences between single-loop, double-loop and triple-loop learning	24
2.5 Equity theory	28
3.1 Multi-stage cluster probability sampling	55
3.2 Description of sections in the questionnaire	56
3.3 Distribution of items in DLOQ	56
3.4 Fit indices of the 21-items DLOQ	57
3.5 Distribution of items in JSS	58
3.6 Distribution of items in MSQ	58
3.7 Reliability of the instruments based on Cronbach's alpha value	61
3.8 Statistical analysis method conducted in this study	64
3.9 Multivariate outliers	66
3.10 Normality and multicollinearity test of this study	66
4.1 Frequency and percentage distribution of participants-Gender	69
4.2 Frequency and percentage distribution of participants-Marital status	69
4.3 Frequency and percentage distribution of participants-Age	69
4.4 Frequency and percentage distribution of participants-Highest qualification	70
4.5 Frequency and percentage distribution of participants-Job position	70

4.6	Descriptive statistics for lecturers' learning organization	71
4.7	Comparison of current results of learning organization with past studies	72
4.8	Descriptive statistics for lecturers' job satisfaction	74
4.9	Comparison of current results of job satisfaction with past studies	74
4.10	Descriptive statistics for lecturers' organizational commitment	75
4.11	Comparison of current results of organizational commitment with past studies	76
4.12	Bivariate correlations for dimensions of lecturers' learning organization, job satisfaction and organizational commitment	78
4.13	Fit indexes of the measurement and structural model	92
4.14	Mediation and Coefficient of the constructs of learning organization in direct model and mediation model	93
4.15	Regression weights for the paths in the mediated model	96

LIST OF FIGURES

Figure		Page
1.1	Number of HEI in China (2019)	13
2.1	Relationship between various models of organizational commitment	16
2.2	Senge's Fifth discipline	20
2.3	Single-loop, double-loop and triple-loop learning	23
2.4	Process flow from discrepancy to job satisfaction	28
2.5	Learning organization framework	31
2.6	Herzberg's Two-Factor theory of job satisfaction	35
2.7	Three Component Model of organizational commitment	36
2.8	Job Characteristics Model	37
2.9	Conceptual framework	41
3.1	Province of China	53
3.2	Cities of Helongjiang Province	54
4.1	Structural relationship between learning organization, job satisfaction and organizational commitment of lecturers	95

LIST OF APPENDICES

Appendix		Page
A	Permission to adopt the instruments	142
B	Research questionnaire (English)	145
C	Research questionnaire (Chinese)	151
D	List of provinces and HEI	157
E	Standardized residuals covariances	159
F	AMOS models	162

LIST OF ABBREVIATIONS

UPM	Universiti Putra Malaysia
HEI	High Education institution
CPD	Continuous Professional Development
DLOQ	Dimensions of Learning Organization Questionnaire
JSS	Job satisfaction survey
OCQ	Organizational Commitment Questionnaire
SEM	Structural Equation Model
TCM	Three-Component Model
AC	Affective Commitment
CC	Continuance Commitment
NC	Normative Commitment
JS	Job satisfaction
OC	Organizational commitment
LO	Learning organization
CL	Continuous Learning
ID	Inquiry and Dialogue
CT	Collaboration and Team learning
SS	Systems
EP	Empowerment
CO	Connection
SL	Strategic Leadership
JCM	Job Characters Model

CFA	Confirmatory Factor Analysis
AVE	Average Variance Extracted
GFI	Goodness of Fit Index
CFI	Comparative Fit Index
TLI	Tucker Lewis Index
IFI	Incremental Fit Index
MLE	Maximum Likelihood Estimation
CR	Construct Reliability
RMSEA	Root Mean Square Error of Approximation
SPSS	Statistical Package of Social Science
AMOS	Analysis of Moment Structure
CI	Confidence Intervals
M	Mean
SE	Standard Error

CHAPTER 1

INTRODUCTION

1.1 Preamble

This chapter provides the background of the study and identifies the problems. This is then followed by research questions and objectives of this study. After that, it highlights the importance of this study and how it will contribute towards curbing the issues pointed out in the problem statement. In the scope of the study, it lays out the limitations and delimitation of this study. This chapter ends with the crucial definitions of the variables in this study.

1.2 Background of the study

Higher Education Institution (HEI) plays the central role in driving this socioeconomic advancement, economic mobility as well as scientific and technological development in a country (Gu et al., 2018; Stephens et al., 2014). Besides providing accessibility of higher education to the massive public, HEI provides the much needed skilled labour in response to the changing labour market. Hence, back in 1999, the Chinese government launched the “*Action Plan for the Revitalization of Education in the 21st Century*” and expanded higher education enrollment aggressively. These past few decades have seen the number of HEI in China increase by leaps and bounds (NBS, 2019). There were only 1041 HEIs back in 2000 but there are now 3740 HEIs in 2019, which is more than triple (Wan, 2006). Similarly, the number of students enrolled had increased exponentially from 5.56 million students in 2000 to 40.04 million students in 2019, which is seven times higher.

Along with the expansion, there is also tremendous progress in faculty development, financial diversification, privatization and internationalization of HEI (Cai, 2013). In order to cope with the rapid development, HEI would need a group of dedicated and committed employees to build the HEI and strive towards better performance (Cesário & Chambel, 2017; Király & Géring, 2019). Since lecturers are the main workforce in HEI, they are the one determining the adaptability of the HEI in face of the disruptions caused by political, social, environmental, economic and technological changes. Among the many work-related attitudes of lecturers, organizational commitment is one of the most critical and influential variables in the field of organizational behaviour. This is because highly committed lecturers will have far-reaching implications on multifarious aspects that will greatly benefit the organization (Huang, 2016). The level of organizational commitment reflects the alignment of their employees’ belief with the organizational goals and values, and the psychology between the employees and the organization (Erdogan & Cavli, 2019; Suma & Lasha, 2013).

Multiple studies on organizational commitment have validated the positive and substantial relationship between organizational commitment and perception of effectiveness (Tang et al., 2003), task performance (Francesco & Chen, 2004), contextual performance (Pradhan & Pradhan, 2015) as well as organizational citizenship behaviours (OCBs) (Wang et al., 2018). A committed lecturer is also known to exhibit more discretionary pro-social behaviour, puts in extra effort and goes the extra mile to improve the organization's efficiency as well as being capable of motivating the students to learn in the classroom better (Yilmaz & Kilic, 2017). In fact, organizational commitment also acts as a mediator on the effect of many important variables, such as leadership and organizational learning on turnover intention of the lecturers (D'Amato & Herzfeldt, 2008; Gatling et al., 2016; Lim et al., 2017). Simply put, a committed employee is often directly involved in various aspects of the organization (Ting, 2011) and exhibits a high level of engagement in implementing the ideals or plans of the organization (Batugal, 2019).

Huge amount of studies have been conducted to identify the predictors of organizational commitment, ranging from demographic aspects to organizational behaviour. Some of the strong predictors of organizational commitment are leadership, organizational justice, perceived supervisor support and quality of work life (Farid et al., 2015; Kaselytė & Malūkaitė, 2013; Li et al., 2018; Othman et al., 2010; Tan et al., 2020; Yu, 2013). Among these predictors, job satisfaction emerged as one of the strongest attitudinal variables in predicting the level of organizational commitment (Ali & Bashir, 2018; Ashraf, 2020; Bao & Wang, 2012; Djaelani et al., 2020; French et al., 2020; Koesmono, 2014; Pham & Pham, 2016). Lecturers with a high level of job satisfaction will work wholeheartedly in implementing the organization's plan and contribute towards the attainment of organizational goals and objectives (Erdogan & Cavli, 2019).

On top of that, job satisfaction also plays a crucial role in strengthening the positive impact of job engagement, leadership, learning climate, organizational culture, organizational support, school climate, work-life balance on organizational commitment of educators (Claudia, 2018; Fitriyana et al., 2016; Jufrizen, 2018; Lotulung et al., 2017; Sakiru et al., 2018; Sari & Seniati, 2020; Shoshani & Eldor, 2016). At the same time, job satisfaction is even able to mitigate the adverse impact of job insecurity and job stress on organizational commitment of educators (Chalim, 2018; P. Li et al., 2017).

Besides affecting the level of organizational commitment, job satisfaction also has tremendous and serious implications on the educators, ranging from performance and organizational citizenship behaviour to burnout and motivation to leave the teaching profession (Shen et al., 2018). Basically, job satisfaction of employees affects almost every aspect of them in both their working life and private life as well. Thus, if an HEI wants to elevate its organizational performance, both the level of job satisfaction and organizational commitment of the lecturers will be essential (Gunawan et al., 2018; Narimawati, 2007; Tolentino, 2013)

Extensive numbers of studies have suggested designing a systematic organizational training for their employees; popularly refer to as Continuous Professional Development (CPD), as a way to strengthen the level of job satisfaction and organizational commitment of lecturers (Bulut & Culha, 2010; Clarke et al., 2019; Ehrhardt et al., 2011; Erdem et al., 2014; Hanaysha, 2016; Klassen & Chiu, 2010; Mahalingam, 2013; Pucciarelli & Kaplan, 2016; Shoshani & Eldor, 2016). A productive learning environment in any organization will ensure that there is continuous growth in the capabilities of their employees and this will invariably create a productive working environment (Joo & Park, 2010). After all, the competitiveness and long-term survival of an organization, to a large extent, depends on the organisations' capacity to embrace and match the continuous changes in the environment of the VUCA world (López et al., 2005). Consequently, the concept of learning organization has piqued the interest of many organisations and researchers around the globe.

Learning organization can provide the necessary competitive edge to make the organization stand out from their competitors (Marquardt, 2019). It elevates the performance of the organization holistically, from individual, team and organizational as well as financial aspects. The impact of learning organization across various organizational outcomes such as creativity, innovation, employee engagement, knowledge transfer and performance of the HEI are well documented across multiple studies (Dee & Leišytė, 2016; Habtoor et al., 2017; Jones, 2018; Sutanto, 2017). Obviously, this includes its profound impact on job satisfaction and organizational commitment as well (Atak & Erturgut, 2010; Balay, 2012; Hanaysha, 2016). Thus, a positive and favourable learning organization is a necessity today to strengthen the employees' commitment and job satisfaction (Lewis-Wilson, 2019).

In essence, learning organization encourages the inflow and outflow of knowledge within and between organisations as it strengthens the empowering leadership in the organization (Naqshbandi & Tabche, 2018). Employees do exhibit a higher level of organizational commitment when they perceive that their organization does invest in their growth and development in the organization (Joo, 2010). In short, all the three key variables, learning organization, job satisfaction and organizational commitment of the lecturers are the vital ingredients for the survival of HEI today (Zhang & Jing, 2016). HEI ought to constantly reorganise, adopt new strategies and adapt to the changing pace of work in order to stay ahead and boost their effectiveness.

1.3 Problem statement

The low level of organizational commitment among lecturers currently is reflected by the serious shortage of lecturers, let alone qualified lecturers to cope with the surging number of HEI in China (Cai, 2013; He et al., 2020; Sadler, 2015). The result of low level of organizational commitment as turnover of lecturers can even reach up to 17% for those teaching in private higher vocational colleges. This is not surprising given that about 33% of educators in many developed nations would leave the teaching profession after a mere 5 years in the teaching profession (Cupit, 2019; Sutchter et al., 2016).

The study conducted by Liu and Onwuegbuzie (2012) in China found that as many as 40.4% of educators reported that they were most likely to leave the teaching profession for another type of profession if there was opportunity. In 2018 alone, 46 HEI in Heilongjiang province were found to have high levels of talent outflow, with a total of 458 lecturers leaving the province. Similar study conducted by Mukhopadhyay (2019) found that many other provinces, such as Guangdong, Zhejiang, Shanghai, Guangxi and Fujian, also struggled with high attrition rates among lecturers.

In order to fix this long-standing issue of organizational commitment among lecturers, identifying aspects of job satisfaction that can be improved are essential as it is a strong predictor of organizational commitment. Regrettably, similar to organizational commitment, the level of job satisfaction among lecturers in China is at an all-time low. Elmer and Crothall (2016) reported that there were a shocking number of strikes and protests among lecturers in China. Hundreds of lecturers demonstrated across numerous HEI such as City College of Dongguan Technology University and Chongqing Nanfang Translators College.

Ultimately, this boils down to transforming the HEI into a learning organization to enhance job satisfaction and organizational commitment of lecturers. While many multinational companies have their own organizational learning process, this is not the case with Chinese organisations. Private organisations especially are more concerned with short-term profits and quick fixes rather than providing learning opportunities for their employees' benefits and long-term growth of the organization (Bai et al., 2017). The management failed to see the opportunity cost associated with the lack of training of their employees. The most common excuse given by many HEIs is the lack of resources and funding. Even for government HEI, funding is extremely scarce and hard to come by unless they are one of the prestigious HEI such as being a part of the Project 98/5 or 21/1 (Costa & Zha, 2020).

This calls for urgent study to explore how learning organization practises can be improved in HEI in China. However, more often than not, those terminologies related to learning organization are often confused with one another (Bocanet & El Kassir, 2016). There are incorrect interchanges between the terminology of organizational learning and learning organization reported in many studies. Some of these studies are also quite limited in concepts, theoretical description and perceptual discussion. While there are some studies that discuss the existing state of the organization as well as the practises or requirements, they fail to explore how the learning organization accounts for the changes at various levels within the organisations, let alone how these influence job satisfaction and organizational commitment.

Even from the substantial number of studies conducted on learning organization, only a small fraction of them are conducted in China. Unlike other countries, China has unique social capital such as *guanxi* (relationships), *li* (rite), *mianzi* (face) and *renqing* (obligations) that can affect the psychological states, organizational commitment and job satisfaction of the lecturers (Child, 2003). Study by Klassen et al. (2010) had indicated

that the difference in cultural factors would affect the relationship between job satisfaction and other variables. Hence, there is a need to explore these variables in China.

Most of the studies conducted in China are inclined to focus on major provinces with metropolitan areas such as Beijing, Shanghai, Guangzhou and Shenzhen. There are very few studies that shed light on the level of learning organization, job satisfaction and organizational commitment in other provinces of China, such as Heilongjiang province (Xia et al., 2020). Heilongjiang is one of the biggest provinces in China with 81 HEI across the huge 454 thousand km² area. Yet, the innovation performance of the HEI is quite disappointing when compared to other provinces. Since China aspires to transform HEI (世界一流大学 *shi jie yi liu da xue*) into the hub that drives the development of the country, it is high time now to examine the current level learning organization of HEI.

1.4 Research objectives

The general objective of this study is to examine the role of job satisfaction as a mediator between learning organization and organizational commitment among lecturers in Higher Education Institutions in Heilongjiang province in China. The specific objectives of this study are to:

1. Determine the level of (a) learning organization, (b) job satisfaction and (c) organizational commitment;
2. Examine the relationships between (a) Continuous learning, (b) Inquiry and dialogue, (c) Collaboration, (d) Systems, (e) Empowerment, (f) Connection, (g) Strategic leadership, (h) job satisfaction and (i) organizational commitment
3. Assess the role of job satisfaction in mediating the relationship between the (a) Continuous learning, (b) Inquiry and dialogue, (c) Collaboration, (d) Systems, (e) Empowerment, (f) Connection, (g) Strategic leadership and organizational commitment;
4. Determine the extent of learning organization and job satisfaction in explaining the organizational commitment.

1.5 Research hypotheses

Corresponding to the objectives above, the following hypotheses were formulated. There are a total of 3 hypotheses for Objective 2 and 1 hypothesis for Objective 3. These hypotheses are further broken down into sub hypotheses that correspond to the relationship between the constructs of learning organization and job satisfaction as well as learning organization and organizational commitment.

Objective 2 – Hypothesis Ha-1

There is a significant relationship between learning organization and organizational commitment.

- Ha-1-1: There is a significant relationship between Continuous learning and organizational commitment
- Ha-1-2: There is a significant relationship between Inquiry and dialogue and organizational commitment
- Ha-1-3: There is a significant relationship between Collaboration and organizational commitment
- Ha-1-4: There is a significant relationship between Systems and organizational commitment
- Ha-1-5: There is a significant relationship between Empowerment and organizational commitment
- Ha-1-6: There is a significant relationship between Connection and organizational commitment
- Ha-1-7: There is a significant relationship between Strategic leadership and organizational commitment

Objective 2 – Hypothesis Ha-2

Ha-3: There is a significant relationship between job satisfaction and organizational commitment

Objective 3 – Hypothesis Ha-3

Job satisfaction plays a mediating role in the relationship between learning organization and organizational commitment.

1.6 Significance of the study

This study examines the various psychological constructs, learning organization, job satisfaction and organizational commitment of lecturers in HEI. Thus, this study will contribute towards various aspects in the field of education.

Firstly, China has unique social capital such as *guanxi* (relationships), *li* (rite), *mianzi* (face) and *renqing* (obligations) that can affect the psychological states, organizational commitment and job satisfaction of the lecturers (Child, 2003). Organizational *guanxi* was found to enhance job satisfaction and affective commitment, but it also reduced continuance and normative commitment (Chen & O'Leary, 2018). Hence, there is a need to explore the relationship between these variables in China, which may be different from the studies in other countries.

Secondly, this study assesses the level of learning organization, job satisfaction and organizational commitment in the Heilongjiang province. It is hopeful that this study will help to analyse the issues that are affecting HEI in this province, both in positive and negative ways. This study will also bridge the gap in the lack of studies of these variables in HEI. The measured level will serve as an ideal comparison between HEI in different provinces for future studies.

Thirdly, this study will contribute towards a deeper understanding of the antecedents and consequences associated with learning organization, job satisfaction and organizational commitment. With insight into the relationship between different dimensions of learning organization, job satisfaction and organizational commitment will allow better policy and interventions to be produced at the management and governmental level. This will allow a comprehensive approach and emphasizes the strength of the learning organization and advance HEI into an ideal learning organization.

Fourthly, based on the underpinning job characteristic model connect the main theories on dimension of learning organization and two factor theories as well as three organizational commitment model to carry out the theoretical framework so this study will provide an integrative framework on how to tackle the issue of organizational commitment in Heilongjiang province of China from the aspect of dimensions of learning organization and job satisfaction.

Finally, this study will provide an understanding on the unique mediating effect of job satisfaction on the relationship between learning organization and organizational commitment. This study will contribute towards a better understanding of lecturers' psychological states in Heilongjiang province. This will be useful not only to the management in HEI but to the Ministry of Education of China in designing specific interventions that can elevate organizational commitment of lecturers and hopefully, be able to retain the best talent in the country. This will have a butterfly effect on numerous other aspects that contribute to practice in the field of Education Administration.

1.7 Scope of the study

Every study has its own limitations and delimitations. Based on the Classification of Instructional Program (NCES, 2020), this study examines the issue of learning organization, job satisfaction and organizational commitment in the field of education. Education is the field that deals with all the aspects of teaching and learning that ranges from the theory and practice to the administration, research and support provided in the course. Specifically, this study falls under the branch of educational administration and supervision. This branch of education concerns the general principles and ways in managing a broad range of educational institutions that covers three aspects: responsibility areas, process and skills (Ibrahim & Abdalla, 2017). This study explores planning and organization in the HEI in order to identify ways to improve organizational commitment of the lecturers.

Firstly, being exploratory in nature, this correlational study did not provide a causal relationship between learning organization, job satisfaction and organizational commitment. Secondly, there are too many antecedents that can directly or indirectly affect the level of organizational commitment of the lecturers. This study intends to focus on the two strongest and most relevant predictors, job satisfaction and learning organization. Thirdly, this study focused on the possible role of job satisfaction as the mediator in the relationship, thus ignoring other possible mediators or moderators in this relationship.

Fourthly, it is not possible to collect the data from the entire population due to constraints in time and resources. Thus, this is a cross-sectional design that captures the complex process of organizational commitment at a certain point of time. Since job satisfaction and organizational commitment are psychological constructs that could fluctuate throughout the year, lecturers may, at different times, exhibit different levels of job satisfaction and organizational commitment due to the nature of their work (Nathaniel et al., 2016). This includes the lecturers' experience of test-related stress at the end of the academic year.

The delimitation in this study comes on the selection of locations and participants. Firstly, this study only covers one province in China. Secondly, although all Chinese people may speak a common Chinese language, due to its sheer size, different geographical locations has their own unique culture and dialect. Variance may also result from varying development and socioeconomic level in different provinces. Thirdly, while HEI comprises teaching and non-teaching staff, this study only focuses on the teaching staff (lecturer). This is because lecturers constitute the main workforce in any HEI and thereby, directly determine the quality of the HEI itself.

1.8 Assumptions

From the background of the study, it is shown that low levels of organizational commitment among lecturers have serious repercussions, and both learning organization and job satisfaction plays a central role in elevating organizational commitment.

Firstly, since this study involves the measurement of perceptions of lecturers, it is assumed that the various instruments that have designed and tested vigorously are able to measure the intended variables. From the epistemological perspective of positivism, learning organization, job satisfaction and organizational commitment are viewed as measurable and able to be reported by the participants (Saunders, 2016). Specifically, Dimensions of Learning Organization Questionnaire (DLOQ) is used to measure learning organization, Job satisfaction survey (JSS) is used to measure job satisfaction and Three-Component Organizational Commitment Questionnaire (OCQ) is used to measure organizational commitment.

Secondly, from the ontological perspective of positivism, it is assumed that the nature of reality is real and there is only one true reality where all measurements made from different perspectives in this study can provide a generalisation. This means that while this study only collects data from few HEI, it can provide a generalisation to other HEI in China. Similarly, other past studies that measure these variables using the same instruments in this study are comparable. Finally, the theoretical framework in this study is developed using theories and models that are developed from other countries. It is assumed that while these theories and models are not developed in China, they are applicable in China.

1.9 Definitions of terminology

The section defined the important terms that would be used in this study: organizational commitment, learning organization, job satisfaction, higher educational institutions and demographic variables.

1.9.1 Organizational commitment

Conceptual definition: In this study, organizational commitment is defined as the devotion and loyalty of the lecturer to the organization due to the strong alignment of their personal expectations with that of the organization. It is the feeling and psychological bond of an employee with the organization as a whole, which is linked to the motivation to leave or stay in the organization (Joo & Park, 2010).

Operational definition: Based on the Three component model of organizational commitment developed by Meyer and Allen (1991), organizational commitment is measured using Organizational Commitment Questionnaire (OCQ). This instrument has 24 items that are categorized into three separate dimensions: affective commitment, continuance commitment and normative commitment.

1.9.1.1 Affective commitment

Affective commitment is the emotional attachment and sense of belonging as a part of the organization. It is nurtured from the social relationships, positive feelings and view of the employee within the organization (Meyer, 2016).

1.9.1.2 Continuance commitment

Continuance commitment is the cognitive evaluation of the employee on the amount of investment that had been put into the organization and would be seen as lost or reduced should the employee leave the organization (Dixon et al., 2014). This included but not

limited to the amount of salary, benefits, privilege and authority given to the employee (Yilmaz & Kilic, 2017).

1.9.1.3 Normative commitment

Normative commitment is the sense of obligation displayed by the employee due to personal belief, moral understanding or work philosophies and social norms in the society (Yilmaz & Kilic, 2017). Employees felt that they should stay merely because they felt strongly that it was the right thing to do based on their personal beliefs that were nurtured over time.

1.9.2 Learning organization

Conceptual definition: In this study, learning organization is defined as the ideal state of the organization when it could excel in generating and gathering new knowledge, relating them and applying in improving its behaviour based on the new knowledge and insights. There are three aspects in a learning organization: (1) the entire organization constantly engages in continuous learning, (2) there is a systematic structure that manages the learning process and (3) the learning process leads to improvement and transformation in the organization's performance (Yang et al., 2004).

Operational definition: Based on the Learning Organization Framework from Marsick and Watkins (2003), learning organization measured using Dimensions of Learning Organization Questionnaire (DLOQ). This instrument has 21 items that are categorized into seven separate dimensions: Continuous learning, Inquiry and dialogue, Collaboration and team learning, Systems, Empowerment, Connection and Strategic leadership.

1.9.2.1 Continuous learning

Continuous learning refers to the creation of continuous learning opportunities in the organization so that the employees can have an ongoing education and growth in the workplace. The organization purposely integrates learning into the work as an on-the-job training programme. Employees are provided with time to support learning and they will be rewarded for learning. This encourages them to identify skills that they will need for their work and constantly seek out opportunities to learn.

1.9.2.2 Inquiry and dialogue

Inquiry and dialogue refers to the advocate of inquiry and dialogue in the organization so that the employees will regularly improve their reasoning skills and listening capacity.

This builds the culture where employees can freely question, experiment and provide feedback in the organization to improve their job performance.

1.9.2.3 Collaboration and team learning

Collaboration and team learning refers to the culture of collaboration and team learning in the organization where employees learn as a team. The workplace is tailored to encourage the teams to work collectively by tapping into different modes of thinking. Every member of the team is treated equally and consistently revised their thinking through discussions. Their group achievement is rewarded by the organization.

1.9.2.4 Systems

Systems refers to the creation of systems to capture and share learning in the organization so that new knowledge generated will be captured and shared effectively across the organization. Technology systems are integrated in the workplace and constantly being maintained to ensure the employees who need the knowledge can tap into them fluidly.

1.9.2.5 Empowerment

Empowerment refers to the empowerment of employees toward a collective vision in the organization so that every employee is aware of their current status and will work together towards the new vision. Regardless of their positions in the organization, all employees are accountable and responsible to achieve this joint vision as they are directly involved in creation and implementation of the vision. This motivates them to take initiatives as well as calculated risks in order to achieve the joint vision.

1.9.2.6 Connection

Connection refers to the connection between the organization and its environment. Employees are requested to look at the bigger picture, think globally and systematically. This allows them to be aware of the effect of their work on its internal and external environment, followed by changes to their work practices to improve their job performance.

1.9.2.7 Strategic leadership

Strategic leadership refers to the cultivation of leaders that advocate and champion learning in the organization. These leaders think strategically and tap into the strength of organizational learning to steer the organization towards new directions and markets.

They empower others, coach them and frequently share information about current industry trends, competitors and organizational directions.

1.9.3 Job satisfaction

Conceptual definition: In this study, job satisfaction is defined as the perception of the lecturer and sense of fulfilment derived from the physical and psychological aspects of work. It is the sense of satisfaction that the lecturer derives from their job and within the working area (Munyengabe et al., 2017).

Operational definition: Based on the Facets of Job Satisfaction by Spector (1997), job satisfaction is measured using Job Satisfaction Survey (JSS). This instrument has 36 items that evaluates various aspects of job satisfaction that is divided into 9 separate dimensions: Pay, Promotion, Supervision, Fringe benefits, Contingent rewards, Operating procedures, Co-workers, Nature of work and Communication.

1.9.4 Higher Educational Institution (HEI)

In China, the education system is divided into higher education, secondary education, primary education, correctional work-study schools, special education and pre-school education (MOE, 2020). In this study, the Higher Educational Institution (HEI) is any social institution that provides higher education to the public and it is self-sustaining financially through tuition fees that it charges on students, government grants or contracts and donations from the public (Fitzgerald et al., 2019). In China, HEI could be categorized either horizontally based on programmes being offered or vertically based on hierarchical systems.

Based on the programmes being offered, HEI can be categorized as Regular HEI, Adult HEI and Other Non-government HEIs as shown in Figure 1.1. The regular HEI includes both HEIs offering degree programmes as well as higher vocational colleges.

If it is based on a hierarchical system, HEI can be categorized into Project 98/5 universities and Project 21/1 universities at the top, non-project universities in the middle and vocational colleges at the bottom. The distinctive difference between them is the amount of subsidy provided by the government. HEI can also be categorized into those directly administered by MOE in the central government, administered by provincial educational bureaus and privately-owned. In this study, sampling is done based on the programmes being offered.

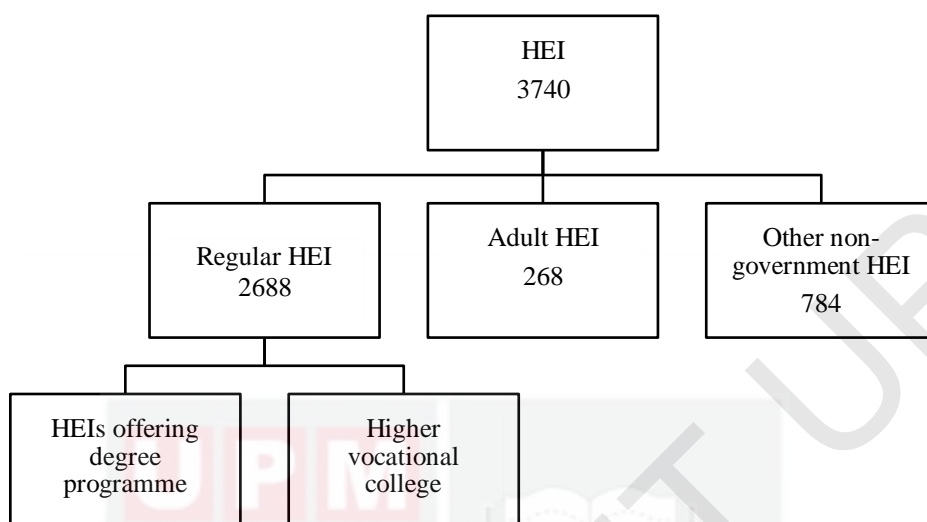


Figure 1.1 : Number of HEI in China (2019)

1.9.5 Gender

Gender is defined as the biological sex assigned at birth (APA, 2019). This disregards the person's attitudes, feelings, behaviour or sexual orientation. In this study, gender is categorized into male and female groups.

1.9.6 Professional life cycle

Huberman (1989) divided the professional life cycle of educators into 5 stages: survival and discovery, stabilization, experimentation and activism, serenity and disengagement. The motivation and commitment of educators were found to peak during mid-career of active experimentation and activism (Day & Gu, 2007). Lester and Horton Jr (2018) suggested a similar stage for lecturers: early-career faculty, mid-career faculty and late-career faculty. In China, the minimum qualification required for an individual to teach in HEI is a Bachelor's degree, which is usually completed by the age of 22 years old (OECD, 2016). In this study, age is divided into four categories: 1 is < 30 years old (stabilization), 2 is 31–40 years old (experimentation and activism), 3 is 41–50 years old (serenity) or 4 is > 50 years old (disengagement).

REFERENCES

- Afif, A. H. (2018). The relationship between perceived organizational supports with job satisfaction and organizational commitment at faculty members of universities. *Sleep and Hypnosis (Online)*, 20(4), 290-293.
- Akhtar, C. S., Awan, S. H., Naveed, S., & Ismail, K. (2016). Social capital and learning organization: Study of higher education institutions of Pakistan. *Social Capital*, 28(29).
- Akpan, C. (2013). Job security and job satisfaction as determinants of organizational commitment among university teachers in cross river state, Nigeria. *British Journal of Education*, 1(2), 82-93.
- Ali, M. H., & Bashir, I. (2018). The effect of job satisfaction on teacher's organizational commitment, with special reference to private sector universities of Punjab, Pakistan. *International Journal of Scientific and Research Publications*, 8(2), 114-125.
- AlKahtani, N., Iqbal, S., Sohail, M., Sheraz, F., Jahan, S., Anwar, B., & Haider, S. (2021). Impact of employee empowerment on organizational commitment through job satisfaction in four and five stars hotel industry. *Management Science Letters*, 11(3), 813-822.
- Almaçık, Ü., Almaçık, E., Akçin, K., & Erat, S. (2012). Relationships between career motivation, affective commitment and job satisfaction. *Procedia-Social and Behavioral Sciences*, 58, 355-362.
- Almutairi, Y. M. N. (2020). Leadership self-efficacy and organizational commitment of faculty members: Higher education. *Administrative Sciences*, 10(3), 66.
- Alonderiene, R., & Majauskaite, M. (2016). Leadership style and job satisfaction in higher education institutions. *International Journal of Educational Management*, 30(1), 140-164.
- Alshmemri, M., Shahwan-Akl, L., & Maude, P. (2017). Herzberg's two-factor theory. *Life Science Journal*, 14(5), 12-16.
- Amarasena, T., Ajward, A., & Ahasanul Haque, A. (2015). The effects of demographic factors on job satisfaction of university faculty members in Sri Lanka. *International Journal of Academic Research and Reflection*, 3(4), 89-106.
- Aminbeidokhti, A., Jamshidi, L., & Mohammadi Hoseini, A. (2016). The effect of the total quality management on organizational innovation in higher education mediated by organizational learning. *Studies in Higher Education*, 41(7), 1153-1166.

- Anggreyani, N. M., & Satrya, I. G. H. (2020). Effect of job satisfaction, employee empowerment and job stress towards organizational commitment. *American Journal of Humanities and Social Sciences Research*, 4(6), 108-113.
- Anh, N. T. M., & Hoa, N. Q. (2017). Relationship between occupational stress among university lecturers and their satisfaction: A study in Hanoi University of Science and Technology (Vietnam). International Conference on Emerging Challenges: Strategic Integration, Hanoi, Vietnam.
- APA. (2019). *The publication manual of the American Psychological Association* (Seventh ed.). American Psychological Association.
- Ary, D., Jacobs, L. C., Irvine, C. K. S., & Walker, D. (2018). *Introduction to research in education*. Cengage Learning.
- Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). *Introduction to Research in Education* (8th ed.). Cengage Learning.
- Ashraf, M. A. (2020). Demographic factors, compensation, job satisfaction and organizational commitment in private university: an analysis using SEM. *Journal of Global Responsibility*, 11(4), 407-436.
- Atak, M., & Erturgut, R. (2010). Importance of educated human resources in the information age and view of information society organizations on human. *Procedia-Social and Behavioral Sciences*, 2(2), 1452-1456.
- Atak, M. (2011). A research on the relation between organizational commitment and learning organization. *African Journal of Business Management*, 5(14), 5612-5616.
- Awang, Z., Ahmad, J. H., & Zin, N. M. (2010). Modelling job satisfaction and work commitment among lecturers: A case of UiTM Kelantan. *Journal of Statistical Modeling and Analytics*, 1(2), 45-59.
- Aytaç, K. Y. (2017). Investigating the working life quality and organizational commitment behaviors of academicians carrying on duties in faculties of sports sciences. *European Journal of Education Studies*, 3(11), 603-628.
- Azbari, M. E., Akbari, M., & Chaijani, M. H. (2015). The effect of strategic leadership and empowerment on job satisfaction of the employees of University of Guilan. *International Journal of Organizational Leadership*, 4(4), 453-464.
- Azmee, N. N., & Kassim, N. A. (2019). Employee empowerment, learning culture and technology in a research-based organization. *International Journal for Infonomics (IJI)*, 12(2), 1878-1883.
- Bagraim, J. J. (2003). The dimensionality of professional commitment. *SA Journal of Industrial Psychology*, 29(2), 6-9.

- Bai, Y., Yuan, J., & Pan, J. (2017). Why SMEs in emerging economies are reluctant to provide employee training: Evidence from China. *International Small Business Journal*, 35(6), 751-766.
- Balay, R. (2012). Effect of learning organization perception to the organizational commitment: A comparison between private and public university. *Educational sciences: Theory and practice*, 12(4), 2474-2486.
- Bao, W., & Wang, J. (2012). Stress in the ivory tower: An empirical study of stress and academic productivity among university faculty in China *Peking University Education Review*, 1, 1-4.
- Bashir, B., & Gani, A. (2019). Testing the effects of job satisfaction on organizational commitment. *Journal of Management Development*, 39(4), 525-542.
- Bashir, A., Amir, A., Jawaad, M., & Hasan, T. (2020). Work conditions and job performance: An indirect conditional effect of motivation. *Cogent Business & Management*, 7(1), 1801961.
- Bashir, N., & Long, C. S. (2015). The relationship between training and organizational commitment among academicians in Malaysia. *Journal of Management Development*, 34(10), 1227-1245.
- Bateson, G. (1972). Social planning and the concept of deutero-learning. Conference on science, philosophy and religion, second symposium New York.
- Batugal, M. L. C. (2019). Organizational culture, commitment and job satisfaction of faculty in private-sectarian Higher Education Institutions (HEIs). *World Journal of Education*, 9(2), 123-135.
- Bikmoradi, A., Fardmal, J., & Torabi, Y. (2018). Correlation of learning organization with organizational commitment and organizational effectiveness of educational and therapeutic centers of Hamadan University of Medical Sciences in Iran. *Amazonia Investiga*, 7(13), 436-448.
- Biza, T. A., & Irbo, M. M. (2020). The impact of leadership styles on employee commitment in Mada Walabu University. *African Journal of Business Management*, 14(9), 291-300.
- Blau, G. (2003). Testing for a four- dimensional structure of occupational commitment. *Journal of occupational and organizational psychology*, 76(4), 469-488.
- Bocanet, A., & El Kassar, T. (2016). Organizational learning and learning organizations: An insight on processes & structure. *SSRN*. <https://ssrn.com/abstract=2769582>
- Boomsma, A., & Hoogland, J. J. (2001). The robustness of LISREL modeling revisited. *Structural equation models: Present and future. A Festschrift in honor of Karl Jöreskog*, 2(3), 139-168.

- Bradley, A. P. (2016). Talent management for universities. *Australian Universities' Review*, 58(1), 13-19.
- Britt, T. W., & Jex, S. M. (2008). *Organizational psychology: A scientist-practitioner approach* (3rd ed.). John Wiley & Sons.
- Bui, H. T., & Baruch, Y. (2012). Learning organizations in higher education: An empirical evaluation within an international context. *Management Learning*, 43(5), 515-544.
- Bulut, C., & Culha, O. (2010). The effects of organizational training on organizational commitment. *International journal of training and development*, 14(4), 309-322.
- Cai, Y. (2013). Chinese higher education: The changes in the past two decades and reform tendencies up to 2020. *China and Brazil: Challenges and opportunities*, 91-118.
- Callea, A., Urbini, F., Ingusci, E., & Chirumbolo, A. (2016). The relationship between contract type and job satisfaction in a mediated moderation model: The role of job insecurity and psychological contract violation. *Economic and Industrial Democracy*, 37(2), 399-420.
- Carter, J. (2021, May 11). China population: census confirms increase to 1.412 billion in 2020, but births fall again. *China Macro Economy*. <https://www.scmp.com/economy/china-economy/article/3132980/china-population-latest-census-confirms-increase-1412-billion>
- CEIC. (2020). *China unemployment rate*. CEIC. <https://www.ceicdata.com/en/indicator/china/unemployment-rate>
- Cegarra-Navarro, J. G., Wensley, A. K., Martinez-Martinez, A., & García-Pérez, A. (2020). Linking organizational commitment with continuous learning through peripheral vision and procedural memory. *European Management Journal*, 38(6), 874-883.
- Cesário, F., & Chambel, M. J. (2017). Linking organizational commitment and work engagement to employee performance. *Knowledge and Process Management*, 24(2), 152-158.
- Chai, D. S., & Dirani, K. (2018). The dimensions of the learning organization questionnaire (DLOQ): A validation study in the Lebanese context. *The learning organization*.
- Chalim, A. S. (2018). Effect of job-insecurity, organizational commitment, job satisfaction on turnover intention: A case study of newcomer lecturers at Private Islamic Universities in East Java Province, Indonesia. *Jurnal Ilmiah Peuradeun*, 6(2), 199-214.

- Chaudhary, N. S., & Bhaskar, P. (2016). Training and development and job satisfaction in education sector. *Training and Development*, 2(8), 89-99.
- Chen, J. J., & O'Leary, P. F. (2018). Impact of guanxi on managerial satisfaction and commitment in China. *Asian Academy of Management Journal*, 23(1).
- Chen, L.-T., Chen, C.-W., & Chen, C.-Y. (2010). Are educational background and gender moderator variables for leadership, satisfaction and organizational commitment? *African Journal of Business Management*, 4(2), 248-261.
- Cheng, Y., & Stockdale, M. S. (2003). The validity of the three-component model of organizational commitment in a Chinese context. *Journal of vocational behavior*, 62(3), 465-489.
- Child, J. (2003). Culture and management in China. In M. Warner (Ed.), *Culture and management in Asia* (Vol. 25, pp. 24-47). Routledge.
- Clarke, T., Preskill, H., Stevenson, A., & Schwartz, P. (2019). Building a culture of learning: Teaching a complex organization how to fish. *The Foundation Review*, 11(1), 6.
- Claudia, M. (2018). The influence of perceived organizational support, job satisfaction and organizational commitment toward organizational citizenship behavior (a study of the permanent lecturers at University of Lambung Mangkurat, Banjarmasin). *Journal of Indonesian Economy and Business*, 33(1), 23-45.
- Cohen, A. (1996). On the discriminant validity of the Meyer and Allen measure of organizational commitment: How does it fit with the work commitment construct? *Educational and psychological measurement*, 56(3), 494-503.
- Cohen, A. (2007). Commitment before and after: An evaluation and reconceptualization of organizational commitment. *Human resource management review*, 17(3), 336-354.
- Costa, D. d. M., & Zha, Q. (2020). Chinese Higher Education: The role of the economy and Projects 211/985 for system expansion. *Ensaio: Avaliação e Políticas Públicas em Educação*, 28(109), 885-908.
- Costello, A. B., & Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical assessment, research, and evaluation*, 10(1), 7.
- Craig, C. A., Allen, M. W., Reid, M. F., Riemenschneider, C. K., & Armstrong, D. J. (2013). The impact of career mentoring and psychosocial mentoring on affective organizational commitment, job involvement, and turnover intention. *Administration & Society*, 45(8), 949-973.

- Creswell, J. W. (2019). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (6th ed.). Pearson.
- Crossan, M. M., Maurer, C. C., & White, R. E. (2011). Reflections on the 2009 AMR decade award: do we have a theory of organizational learning? *Academy of Management review*, 36(3), 446-460.
- Cupit, L. B. (2019). Examining the Role of job resources as moderators in the relationship between job stress, job satisfaction, and quit intention in teachers (Publication Number 4840) Louisiana State University and Agricultural and Mechanical College. https://digitalcommons.lsu.edu/gradschool_dissertations/4840
- CSIS. (2016). How Does Education in China Compare with Other Countries? *China Power*. <https://chinapower.csis.org/education-in-china/>
- D'Amato, A., & Herzfeldt, R. (2008). Learning orientation, organizational commitment and talent retention across generations: A study of European managers. *Journal of Managerial Psychology*, 23(8), 929-953.
- Day, C., & Gu, Q. (2007). Variations in the conditions for teachers' professional learning and development: Sustaining commitment and effectiveness over a career. *Oxford review of education*, 33(4), 423-443.
- De Giusti, A. (2020). *Policy Brief: Education during COVID-19 and beyond* (1850-9959). https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf
- Dee, J. R., & Leišytė, L. (2016). Organizational learning in higher education institutions: Theories, frameworks, and a potential research agenda. In *Higher education: Handbook of theory and research* (pp. 275-348). Springer.
- Dey, T., Kumar, A., & Kumar, Y. (2014). A new look at the antecedents and consequences of organizational commitment: A conceptual study. *Published in International Journal of Humanities and Social Sciences*.
- Dixon, F. A., Yssel, N., McConnell, J. M., & Hardin, T. (2014). Differentiated instruction, professional development, and teacher efficacy. *Journal for the Education of the Gifted*, 37(2), 111-127.
- Djaelani, A., Sanusi, A., & Triamanto, B. (2020). Spiritual leadership, job Satisfaction, and its effect on organizational commitment and organizational citizenship behavior. *Management Science Letters*, 10(16), 3907-3914.
- Docherty, P., Forslin, J., & Shani, A. B. (2002). *Creating sustainable work systems: emerging perspectives and practice*. Routledge.

- Drumm, B. T., & Jong, A. S. (2020). A semester like no other: A student and lecturer perspective on the impact of Covid-19 on 3rd level academic life. *All Ireland Journal of Higher Education*, 12(3).
- Duyar, I., Gumus, S., & Bellibas, M. S. (2013). Multilevel analysis of teacher work attitudes. *International Journal of Educational Management*.
- Edmondson, A., & Moingeon, B. (1998). From organizational learning to the learning organization. *Management Learning*, 29(1), 5-20.
- Ehrhardt, K., Miller, J. S., Freeman, S. J., & Hom, P. W. (2011). An examination of the relationship between training comprehensiveness and organizational commitment: Further exploration of training perceptions and employee attitudes. *Human resource development quarterly*, 22(4), 459-489.
- Eilertsen, S., & London, K. (2005). *Modes of organizational learning*. http://drmichaelroe.weebly.com/uploads/2/8/1/8/2818319/single_and_double_loop_learning.pdf
- Elmer, K., & Crothall, G. (2016). Over-worked and under-paid: The long-running battle of China's teachers for decent work. *China Labour Bulletin*. <https://www.clb.org.hk/sites/default/files/Teachers%20final.pdf>
- Elkhdr, H., & Kanbur, A. (2018). Organizational Commitment in Relation to Demographic Characteristics among Lecturers Working at Libyan Universities. *Int. J. Humanit. Soc. Sci. Invent*, 7(12), 46-52.
- Emilda, b. H., Mahdinezhad, M., Rambeli, N., Feng, J. B., Jing, Q., & Zahari, F. (2020). Learning organization and organizational commitment as perceived by academics in Malaysian Tertiary Education Institutions. *Ilkogretim Online*, 19(3), 95-101.
- Emmons, W. R., Kent, A. H., & Ricketts, L. (2019). Is college still worth it? The new calculus of falling returns. *The New Calculus of Falling Returns*, 297-329.
- EPPI. (2021). *Continuing professional development*. EPPI-Centre. Retrieved January 3rd from <https://eppi.ioe.ac.uk/cms/Default.aspx?tabid=63>
- Erdem, M., İlğan, A., & Uçar, H. İ. (2014). Relationship between Learning Organization and Job Satisfaction of Primary School Teachers. *International Online Journal of Educational Sciences*, 6(1), 8-20.
- Erdogan, E., & Cavli, E. (2019). Investigation of organizational commitment levels of physical education and classroom teachers. *Universal Journal of Educational Research*, 7(1), 259-265.
- Farid, H., Izadi, Z., Ismail, I. A., & Alipour, F. (2015). Relationship between quality of work life and organizational commitment among lecturers in a Malaysian public research university. *The Social Science Journal*, 52(1), 54-61.

- Fei, Y. Z., Haur, F. C., & Azam, S. F. (2019). Development of High-level Talents Lecturer Team in Provincial Universities: Study on Tongren University, Guizhou, China. *Development, 11*(14).
- Fitriyana, R., Eliyana, A., Suryarini, D. Y., & Yusuf, R. M. (2016). Understanding the mediator role of job satisfaction on lecturer's organizational commitment. Global Conference on Business, Management and Entrepreneurship,
- Fitzgerald, H. E., Bruns, K., Sonka, S. T., Furco, A., & Swanson, L. (2019). The centrality of engagement in higher education. *Journal of Higher Education Outreach and Engagement, 16*(3), 7-28.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2019). *How to design and evaluate research in education* (10th ed.). McGraw-Hill New York.
- Francesco, A. M., & Chen, Z. X. (2004). Collectivism in action: Its moderating effects on the relationship between organizational commitment and employee performance in China. *Group & Organization Management, 29*(4), 425-441.
- French, K. A., Allen, T. D., Miller, M. H., Kim, E. S., & Centeno, G. (2020). Faculty time allocation in relation to work-family balance, job satisfaction, commitment, and turnover intentions. *Journal of vocational behavior, 120*, 1-14.
- Friedman, H. H., & Kass-Shraibman, F. (2017). What it takes to be a superior college president. *The learning organization, 24*(5), 286-297.
- Friedman, V. J., Lipshitz, R., & Popper, M. (2005). The mystification of organizational learning. *Journal of management inquiry, 14*(1), 19-30.
- Gatling, A., Kang, H. J. A., & Kim, J. S. (2016). The effects of authentic leadership and organizational commitment on turnover intention. *Leadership & Organization Development Journal, 37*(2), 181-199.
- Genevičiūtė-Janonienė, G., & Endriulaitienė, A. (2014). Employees' organizational commitment: Its negative aspects for organizations. *Procedia-Social and Behavioral Sciences, 140*, 558-564.
- Gentle, P., & Clifton, L. (2017). How does leadership development help universities become learning organisations? *The learning organization, 24*(5), 278-285.
- Ghaffari, S., & Shah, I. M. (2011, December 3-6). *The analysing of Marsick and Watkins theory in comparison with other learning theories* International Conference of the Asia Chapter, Kuala Lumpur, Malaysia.
- Gharakhani, D., & Zaferanchi, A. (2019). The effect of job burnout on turnover intention with regard to the mediating role of job satisfaction. *Journal of Health, 10*(1), 109-117.

- Ghayas, M. M., & Khan, M. M. S. (2019). Learning organizational practices and job satisfaction: A case of IT sector of Karachi. *International Journal of Experiential Learning & Case Studies*, 4(2).
- Ghosh, S., & Swamy, D. (2014). A literature review on organizational commitment – A comprehensive summary. *Journal of Engineering Research and Applications*, 4(120), 04-14.
- Glaveski, S. (2020). *Time rich: Do your best work live your best life*. John Wiley & Sons Australia Limited. <https://books.google.com.sg/books?id=BjDLzQEACAAJ>
- Gu, J., Li, X., & Wang, L. (2018). *Higher education in China*. Springer Singapore.
- Gunawan, A., Barsa, L., & Tua, H. (2018). Determinant of lecturers work satisfaction and implication on lecturers performance at maritime higher education in DKI Jakarta. *International Review of Management and Marketing*, 8(4), 14.
- Habtoor, A., Arshad, D. A., & Hassan, H. (2017). The impact of learning organization on knowledge transfer and organizational performance. *Journal of Advanced Research Design*, 31(1), 1-8.
- Habtoor, A. S., Arshad, D., & Hassan, H. (2019). Do competitive strategies moderate the relationship between learning organization and performance of higher education institutions? *Academy of Strategic Management Journal*, 18(2), 1-11.
- Haerani, S., Pahlevi, C., & Amar, M. Y. (2017). The effects of organization elements on organization performance of the regional own enterprises in DKI Jakarta, Indonesia. *Scientific Research Journal*, 5(9), 23-29.
- Hahn, M. H., Lee, K. C., & Lee, D. S. (2015). Network structure, organizational learning culture, and employee creativity in system integration companies: The mediating effects of exploitation and exploration. *Computers in Human Behavior*, 42, 167-175.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning EMEA.
- Hamiz, M., Bakri, M., Kamaruddin, N., & Mohamed, A. (2018). Assessment analytic theoretical framework based on learners' continuous learning improvement. *Indonesian Journal of Electrical Engineering and Computer Science*, 11(2), 682-687.
- Hanaysha, J. (2016). Testing the effects of employee engagement, work environment, and organizational learning on organizational commitment. *Procedia-Social and Behavioral Sciences*, 229(8), 289-297.

- Hanaysha, J., & Tahir, P. R. (2016). Examining the effects of employee empowerment, teamwork, and employee training on job satisfaction. *Procedia-Social and Behavioral Sciences*, 229, 298-306.
- Hariyani, F. (2017). Learning organization, the organizational commitment, job satisfaction, iso system implementation effectiveness and impact on performance organization. *Jurnal Ilmiah Universitas Batanghari Jambi*, 15(4), 35-39.
- Hanaysha, J. (2016). Examining the effects of employee empowerment, teamwork, and employee training on organizational commitment. *Procedia-Social and Behavioral Sciences*, 229, 298-306.
- Hayes, A. F., & Scharkow, M. (2013). The relative trustworthiness of inferential tests of the indirect effect in statistical mediation analysis: Does method really matter? *Psychological science*, 24(10), 1918-1927.
- He, Y.-M., Pei, Y.-L., Ran, B., Kang, J., & Song, Y.-T. (2020). Analysis on the higher education sustainability in China based on the comparison between universities in China and America. *Sustainability*, 12(2), 573.
- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence-based nursing*, 18(3), 66-67.
- Hertzog, M. J. (2017). *Protections of tenure and academic freedom in the United States: Evolution and interpretation*. Springer.
- Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The motivation to work*. John Wiley and Sons.
- Hijazi, S., Kasim, A. L., & Daud, Y. (2017). Leadership styles and their relationship with the private university employees' job satisfaction in United Arab Emirates. *Journal of Public Administration and Governance*, 6(4), 110-124.
- Hockley, T., Ho, J., & Nesfield, W. (2020). *Impact on the Higher Education Sector*. PwC Singapore. Retrieved October 20th from <https://www.pwc.com/sg/en/publications/a-resilient-tomorrow-covid-19-response-and-transformation/higher-education.html>
- House, R. J., & Wigdor, L. A. (1967). Herzberg's dual- factor theory of job satisfaction and motivation: A review of the evidence and a criticism. *Personnel psychology*, 20(4), 369-390.
- Hsu, H.-Y. (2009). *Organizational learning culture's influence on job satisfaction, organizational commitment, and turnover intention among R&D professionals in Taiwan during an economic downturn*. University of Minnesota.

- Hu, B., Hou, Z., Mak, M. C. K., Xu, S. L., Yang, X., Hu, T., Qiu, Y., & Wen, Y. (2019). Work engagement, tenure, and external opportunities moderate perceived high-performance work systems and affective commitment. *Social Behavior and Personality: an international journal*, 47(5), 1-16.
- Huang, C. (2016). Employees' perception of corporate social responsibility: Corporate volunteer and organizational commitment. *International Business Research*, 9(9), 142-149.
- Huberman, M. (1989). The professional life cycle of teachers. *Teachers college record*, 91(1), 31-57.
- Hussein, N., Omar, S., Noordin, F., & Ishak, N. A. (2016). Learning organization culture, organizational performance and organizational innovativeness in a public institution of higher education in Malaysia: A preliminary study. *Procedia Economics and Finance*, 37, 512-519.
- IBM. (2014). *Training building skills for a smarter planet: The value of training*. IBM. <https://www.ibm.com/services/learning/pdfs/IBMTraining-TheValueofTraining.pdf>
- Ibrahim, A. A., & Abdalla, M. S. (2017). Educational management, educational administration and educational leadership: definitions and general concepts. *SAS Journal of Medicine (SASJM)*, 3(6), 2454-5112.
- Imenda, S. (2014). Is there a conceptual difference between theoretical and conceptual frameworks? *Journal of Social Sciences*, 38(2), 185-195.
- Ineme, K. M., & Ineme, M. E. (2016). Impact of job satisfaction and burnout on attitudes towards strike action among employees of a Nigerian university. *Journal of Higher Education Policy and Management*, 38(6), 664-675.
- Ismail, D. H., Asmawi, M., & Widodo, S. E. (2020). The effect of organizational culture, leadership style, and trust to organizational commitments of LP3I polytechnic jakarta lectures. *International Journal of Human Capital Management*, 4(1), 16-25.
- Ismail, H. N. (2016). Training and organizational commitment: exploring the moderating role of goal orientation in the Lebanese context. *Human Resource Development International*, 19(2), 152-177.
- Jaiswal, G., & Sharma, M. (2019). The relationship between trust, learning capability and affective organizational commitment. *Proceedings of 10th International Conference on Digital Strategies for Organizational Success*, 1410-1423.
- Jallad, M. N. (2021). The Relationship Between Learning Organization and Job Satisfaction: Case Study of Palestinian Municipalities. *European Journal of Business and Management*, Vol.13,63-70.

- Jaleha, A. A., & Machuki, V. N. (2018). Strategic leadership and organizational performance: A critical review of literature. *European Scientific Journal*, 14(35), 124-149.
- Jex, S. M., & Britt, T. W. (2014). *Organizational psychology: A scientist-practitioner approach*. John Wiley & Sons.
- Jiang, J. J., Klein, G., & Saunders, C. (2012). Discrepancy theory models of satisfaction in IS research. In *Information systems theory* (pp. 355-381). Springer.
- Jiang, L., & Johnson, M. J. (2018). Meaningful work and affective commitment: A moderated mediation model of positive work reflection and work centrality. *Journal of Business and Psychology*, 33(4), 545-558.
- Jiang, Y., Li, P., Wang, J., & Li, H. (2019). Relationships between kindergarten teachers' empowerment, job satisfaction, and organizational climate: a Chinese model. *Journal of Research in Childhood Education*, 33(2), 257-270.
- Jiang, Z., Gollan, P. J., & Brooks, G. (2017). Relationships between organizational justice, organizational trust and organizational commitment: a cross-cultural study of China, South Korea and Australia. *The International Journal of Human Resource Management*, 28(7), 973-1004.
- Jing, Z. (2021). The Relationship between Job Satisfaction, Organizational Commitment, and Turnover Intention of Doctoral Lecturers: A Case Study of Universities in Mianyang, China. *Nimitmai Review Journal*, 4(1), 52-60.
- Jo, S. J., & Joo, B.-K. (2011). Knowledge sharing: The influences of learning organization culture, organizational commitment, and organizational citizenship behaviors. *Journal of Leadership & Organizational Studies*, 18(3), 353-364.
- Johanson, G. A., & Brooks, G. P. (2010). Initial scale development: sample size for pilot studies. *Educational and psychological measurement*, 70(3), 394-400.
- Jonathan, H., Thibeli, M., & Darroux, C. (2013). Impact investigation of organizational commitment on intention to leave of public secondary school teachers in Tanzania. *Developing Country Studies*, 3(11), 78-91.
- Jones, J. R. (2018). *The Influence of Learning Organization Maturity on Employee Engagement within Higher Education Information Technology Departments* Gonzaga University]. Washington, USA.
- Joo, B. K. (2010). Organizational commitment for knowledge workers: The roles of perceived organizational learning culture, leader-member exchange quality, and turnover intention. *Human resource development quarterly*, 21(1), 69-85.

- Joo, B. K., & Park, S. (2010). Career satisfaction, organizational commitment, and turnover intention. *Leadership & Organization Development Journal*, 31(6), 482-500.
- Jufrizen, J. (2018). The Effect Of Organizational Culture And Islamic Work Ethic On Permanent Lecturers' Job Satisfaction, Organizational Commitment And Work Performance at Private Islamic Universities in the city of Medan. International Conference of Economic Studies (ICOES),
- Jung, H. S., Song, M. K., & Yoon, H. H. (2021). The effects of workplace loneliness on work engagement and organizational commitment: moderating roles of leader-member exchange and coworker exchange. *Sustainability*, 13(2), 948.
- Kandri, S. E. (2020). *How COVID-19 is driving a long-overdue revolution in education*. . World Economic Forum. <https://www.weforum.org/agenda/2020/05/how-covid-19-is-sparking-a-revolution-in-higher-education/>
- Kapur, D., & Perry, E. J. (2015). Higher education reform in China and India: The role of the state. *Harvard-Yenching Institute Working Paper Series*.
- Karsen, M., Cassandra, C., & Maya Kristin, D. (2019). Tools comparison for social knowledge management adoption to support collaboration among lecturers. *International Journal of Mechanical Engineering and Technology*, 10(3), 726-737.
- Kawiana, I., Dewi, L. K. C., Hartati, P. S., Setini, M., & Asih, D. (2021). Effects of leadership and psychological climate on organizational commitment in the digitization era. *The Journal of Asian Finance, Economics, and Business*, 8(1), 1051-1062.
- Kaselytė, U., & Malūkaitė, K. (2013). Antecedents of Affective Organizational Commitment Among Economics and Management Lecturers in the Higher Education Institutions in the Baltics. *SSE Riga Student Research Papers*, 5(153).
- Khanna, V. (2017). Measuring job satisfaction of academicians using Herzberg theory. *Delhi Business Review*, 18(2), 75-86.
- Khunsoonthornkit, A., & Panjakajornsak, V. (2018). Structural equation model to assess the impact of learning organization and commitment on the performance of research organizations. *Kasetsart Journal of Social Sciences*, 39(3), 457-462.
- Kim, H., & Kao, D. (2014). A meta-analysis of turnover intention predictors among US child welfare workers. *Children and Youth Services Review*, 47, 214-223.
- Kim, K., Watkins, K. E., & Lu, Z. L. (2017). The impact of a learning organization on performance: Focusing on knowledge performance and financial performance. *European Journal of Training and Development*, 41(2), 177-193.

- Kiplangat, H. K. (2017). The relationship between leadership styles and lecturers' job satisfaction in institutions of higher learning in Kenya. *Universal Journal of Educational Research*, 5(3), 435-446.
- Király, G., & Géring, Z. (2019). Introduction to 'Futures of Higher Education' special issue. *Futures*, 111, 123-129.
- Kivunja, C. (2018). Distinguishing between theory, theoretical framework, and conceptual framework: A systematic review of lessons from the field. *International Journal of Higher Education*, 7(6), 44-53.
- Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of educational Psychology*, 102(3), 741-756.
- Klassen, R. M., Usher, E. L., & Bong, M. (2010). Teachers' collective efficacy, job satisfaction, and job stress in cross-cultural context. *The Journal of Experimental Education*, 78(4), 464-486.
- Koesmono, H. T. (2014). The influence of organizational culture, servant leadership, and job satisfaction toward organizational commitment and job performance through work motivation as moderating variables for lecturers in economics and management of private universities in east Surabaya. *Educational Research International*, 3(4), 25-39.
- Lashkariani, S. O. (2020). The influence of job stress on job satisfaction among female lecturers. *International Journal of Innovative Science and Research Technology*, 5(4), 1263-1268.
- Lee, A. N., & Nie, Y. (2013). Development and validation of the school leader empowering behaviours (SLEB) scale. *The Asia-Pacific Education Researcher*, 22(4), 485-495.
- Lee, P., Miller, M. T., Kippenbrock, T. A., Rosen, C., & Emory, J. (2017). College nursing faculty job satisfaction and retention: A national perspective. *Journal of Professional Nursing*, 33(4), 261-266.
- Lemoine, P. A., Hackett, P. T., & Richardson, M. D. (2017). Global higher education and VUCA—Volatility, uncertainty, complexity, ambiguity. In *Handbook of research on administration, policy, and leadership in higher education* (pp. 549-568). IGI Global.
- Lester, J., & Horton Jr, D. (2018). Chapter 14: Public Scholarship Across Faculty Career Stages. In A. Kezar, Y. Drivalas, & J. A. Kitchen (Eds.), *Envisioning Public Scholarship for our Time; Models for Higher Education Researchers*. Stylus Publishing. <https://sty.presswarehouse.com/books/features.aspx>

- Lewis-Wilson, C. P. (2019). *Strategies to Reduce Employee Turnover to Increase Profitability in a College Workplace* [Walden University]. College of Management and Technology.
- Li, J., & Lambert, V. A. (2008). Job satisfaction among intensive care nurses from the People's Republic of China. *International Nursing Review*, 55(1), 34-39.
- Li, M., & Lu, X. (2007). The Construct Validation of Learning Organization and Its Influence upon Firm Performance in Mainland China. *Online Submission*.
- Li, M., Wang, Z., Gao, J., & You, X. (2017). Proactive personality and job satisfaction: The mediating effects of self-efficacy and work engagement in teachers. *Current Psychology*, 36(1), 48-55.
- Li, P., Liu, Y., Yuan, P., & Ju, F. (2017). The study on the relationship between university faculties' job stress and organizational commitment in China. *Procedia computer science*, 122, 642-648.
- Li, Y., Castano, G., & Li, Y. (2018). Perceived supervisor support as a mediator between Chinese university teachers' organizational justice and affective commitment. *Social Behavior and Personality: an international journal*, 46(8), 1385-1396.
- Lien, B., Yang, B., & Li, M. (2002). An examination of psychometric properties of the Chinese version of the Dimensions of the Learning Organization Questionnaire in the Taiwanese context. *Academy of Human Resource Development Conference Proceedings*, 854-861.
- Lien, B. Y. H., Hung, R. Y. Y., Yang, B., & Li, M. (2006). Is the learning organization a valid concept in the Taiwanese context? *International Journal of Manpower*.
- Lim, A., Loo, J., & Lee, P. (2017). The impact of leadership on turnover intention: The mediating role of organizational commitment and job satisfaction. *Journal of Applied Structural Equation Modeling*, 1(1), 27-41.
- Liu, S., & Onwuegbuzie, A. J. (2012). Chinese teachers' work stress and their turnover intention. *International Journal of Educational Research*, 53, 160-170.
- Liu, Y., & Werblow, J. (2019). The operation of distributed leadership and the relationship with organizational commitment and job satisfaction of principals and teachers: A multi-level model and meta-analysis using the 2013 TALIS data. *International Journal of Educational Research*, 96, 41-55.
- Locke, E. (1976). Range of Affect Theory.
- López, S. P., Peón, J. M. M., & Ordás, C. J. V. (2005). Organizational learning as a determining factor in business performance. *The learning organization*.

- Lotulung, M. S., Senduk, J. F., Kambey, E. S., & Paturusi, A. (2017). Predictors of Organizational Commitment Moderated by Job Satisfaction: What Can We Learn from Indonesia? *Journal of Education and Human Development*, 6(3), 53-64.
- Lourel, C. S. (2017). The applicability of the dimensions of learning organizations in Philippine universities: The case of the university of perpetual help system. Leadership and management in higher education: Challenges, opportunities and ways forward, Ho Chi Minh City, Vietnam.
- Lutterer, W. (2012). Deutero-learning. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp. 939-941). Springer US. https://doi.org/10.1007/978-1-4419-1428-6_260
- Luo, N., Guo, X., Lu, B., & Chen, G. (2018). Can non-work-related social media use benefit the company? A study on corporate blogging and affective organizational commitment. *Computers in Human Behavior*, 81, 84-92.
- Ma, L., & Tsui, A. S. (2015). Traditional Chinese philosophies and contemporary leadership. *The Leadership Quarterly*, 26(1), 13-24.
- Mahalingam, E. (2013, February 9th). Salary vs job satisfaction. *The Star Online*. <https://www.thestar.com.my/business/business-news/2013/02/09/salary-vs-job-satisfaction/>
- Mahat, M. and Tatebe, J. (2019), "Demystifying the Academic Promotion Process", Mahat, M. and Tatebe, J. (Ed.) *Achieving Academic Promotion (Surviving and Thriving in Academia)*, Emerald Publishing Limited, Bingley, pp. 3-27.
- Malik, M. E., Danish, R. Q., & Munir, Y. (2012). Determinants of learning organization in higher education institutes of Pakistan: A correlational study. *International Journal of Innovation, Management and Technology*, 3(2), 117-120.
- Malik, M. E., Nawab, S., Naeem, B., & Danish, R. Q. (2010). Job satisfaction and organizational commitment of university teachers in public sector of Pakistan. *International journal of business and management*, 5(6), 17.
- Malik, P., & Garg, P. (2017). The relationship between learning culture, inquiry and dialogue, knowledge sharing structure and affective commitment to change. *Journal of Organizational Change Management*, 30(4), 610-631
- Marquardt, M. (2001). Is it a learning organization? In M. Silberman (Ed.), *The consultant's toolkit: High-impact questionnaires, activities, and how-to guides for diagnosing and solving client problems* (pp. 20-23). McGraw-Hill.
- Marquardt, M. (2019). Building learning organization with action learning. In A. Örtenblad (Ed.), *The Oxford handbook of the learning organization* (pp. 105). Oxford University Press.

- Marques, J. M. R., La Falce, J. L., Marques, F. M. F. R., De Muylder, C. F., & Silva, J. T. M. (2019). The relationship between organizational commitment, knowledge transfer and knowledge management maturity. *Journal of Knowledge Management*.
- Marsick, V. J., & Watkins, K. E. (1999). *Facilitating learning organizations: Making learning count*. Gower Publishing, Ltd.
- Marsick, V. J., & Watkins, K. E. (2003). Demonstrating the value of an organization's learning culture: the dimensions of the learning organization questionnaire. *Advances in developing human resources*, 5(2), 132-151.
- Martono, S., Khoiruddin, M., Wijayanto, A., Ridloah, S., Wulansari, N. A., & Udin, U. D. I. N. (2020). Increasing teamwork, organizational commitment and effectiveness through the implementation of collaborative resolution. *The Journal of Asian Finance, Economics and Business*, 7(6), 427-437.
- Mbuya, R. M. (2016). *Can job enrichment improve job satisfaction at Sokoine university of Agriculture in Tanzania?* [Mzumbe University].
- Meilani, Y. F. C. P., Barry, R. R., Djati, S. P., & Sutawidjaya, A. H. (2020). Antecedents and consequences of Indonesia private university lecturer's job satisfaction *International Journal of Research In Commerce and Management Studies*, 2(1), 178-191.
- Meilani, Y. F. C. P., & Hariandja, E. S. (2019, October 23-25). *Organizational commitment of lecturer: Investigation of generation X in XYZ University* Proceedings of the International Conference on Industrial Engineering and Operations Management, Toronto, Canada,.
- Mercurio, Z. A. (2015). Affective commitment as a core essence of organizational commitment: An integrative literature review. *Human Resource Development Review*, 14(4), 389-414.
- Meyer, J. P. (2016). *Handbook of employee commitment*. Edward Elgar Publishing.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human resource management review*, 1(1), 61-89.
- Miner, J. (2005). Organizational behaviour I—essential theories of motivation and leadership, 109. *Aufl., Armonk*.
- MOE. (2020). *Number of schools, educational personnel and full-time teachers by type and level*. http://en.moe.gov.cn/documents/statistics/2017/national/201808/t20180808_344699.html

- Mohd-Zainal, A., Yusof, S. M., & Goodyer, J. G. J. (2015). Dimensions of learning organisation in Malaysian manufacturing companies: Testing measurement invariance and comparing latent means. *Jurnal Mekanikal*.
- Mok, K. H., & Wu, A. M. (2016). Higher education, changing labour market and social mobility in the era of massification in China. *Journal of Education and Work*, 29(1), 77-97.
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of vocational behavior*, 14(2), 224-247.
- Moyo, N. (2019). Testing the effect of employee engagement, transformational leadership and organizational communication on organizational commitment. *J. Mgt. Mkt. Review*, 4(4), 270-278.
- Mukhopadhyay, B. (2019). Guanxi vs talent acquisition: Evaluating the effects of Guanxi referrals in sino-foreign colleges. *Research Journal of Business and Management*, 6(4), 232-242.
- Munyengabe, S., Haiyan, H., Yiyi, Z., & Jiefei, S. (2017). Factors and levels associated with lecturers' motivation and job satisfaction in a Chinese university. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(10), 6415-6430.
- Mustapha, N. (2013). The influence of financial reward on job satisfaction among academic staffs at public universities in Kelantan, Malaysia. *International Journal of Business and Social Science*, 4(3).
- Naeem, A., Mirza, N. H., Ayyub, R. M., & Lodhi, R. N. (2019). HRM practices and faculty's knowledge sharing behavior: mediation of affective commitment and affect-based trust. *Studies in Higher Education*, 44(3), 499-512.
- Naqshbandi, M. M., & Tabche, I. (2018). The interplay of leadership, absorptive capacity, and organizational learning culture in open innovation: Testing a moderated mediation model. *Technological Forecasting and Social Change*, 133, 156-167.
- Narimawati, S. U. (2007). The influence of work satisfaction, organizational commitment and turnover intention towards the performance of lecturers at West Java's private higher education institution. *Journal of Applied Sciences Research*, 3(7), 549-557.
- Nathaniel, P., Sandilos, L. E., Pendergast, L., & Mankin, A. (2016). Teacher stress, teaching-efficacy, and job satisfaction in response to test-based educational accountability policies. *Learning and Individual Differences*, 50, 308-317.
- NBS. (2019). *China Statistical Yearbook*. . National Bureau of statistics of China. . <http://www.stats.gov.cn/english/Statisticaldata/AnnualData/>

- NCES. (2020). *Classification of Instructional Programs* (N. C. f. E. Statistics, Ed. Fifth ed.). Department of Education
<https://nces.ed.gov/ipeds/cipcode/Default.aspx?y=56>
- Neves, T., Graveto, J., Rodrigues, V., Marôco, J., & Parreira, P. (2018). Organizational commitment, psychometric qualities and invariance of the Meyer and Allen Questionnaire for Portuguese Nurses1. *Revista Latino-Americana de Enfermagem*, 26.
- Newman, A., Thanacoody, R., & Hui, W. (2011). The impact of employee perceptions of training on organizational commitment and turnover intentions: a study of multinationals in the Chinese service sector. *The International Journal of Human Resource Management*, 22(8), 1765-1787.
- Ngoc, T. H., Van Nhan, P., Son, D. H., Duc, T. T. A., & Nam, T. G. (2020). Lecturer professional development strategies in a higher education institution in Ha Tinh Province at a Time of Educational Reforms. *Вопросы образования*(2 (eng)).
- Natalia, M. S., & Mangunsong, F. M. (2018). Teacher's perception of school climate and social-emotional learning, job satisfaction, teaching efficacy, and stress among teachers in special schools for the mentally disabled. *Diversity in Unity: Perspectives from Psychology and Behavioral Sciences*.
- Nielsen, I., Smyth, R., & Liu, Y. (2011). The moderating effects of demographic factors and hukou status on the job satisfaction–subjective well-being relationship in urban China. *The International Journal of Human Resource Management*, 22(06), 1333-1350.
- O'Reilly, C. A., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology*, 71(3), 492.
- Oduwaiye, R. O., Ijaiya, N. Y. S., & Kayode, D. J. (2017). Knowledge management practices and lecturer job commitment in universities in North Central Nigeria. *International Conference on Education, Development & Innovation*,
- OECD. (2016). *Education in China: A snapshot*. OESD.
<https://www.oecd.org/china/Education-in-China-a-snapshot.pdf>
- Oldham, G. R., Hackman, J. R., Smith, K., & Hitt, M. (2005). How job characteristics theory happened. *The Oxford handbook of management theory: The process of theory development*.
- Oo, M., & Myint, K. T. (2020). The relationship between teacher empowerment and organizational commitment. *Research Journal of 26th Anniversary of Sagaing University of Education*, 2019(2), 383.

- Oosi, O., Koramo, M., Korhonen, N., Järvelin, A. M., Luukkonen, T., Tirronen, J., & Jauhola, L. (2019). A study on structures to support continuous learning–international bench learning.
- Örtenblad, A. (2001). On differences between organizational learning and learning organization. *The learning organization*.
- Örtenblad, A. (2018). What does “learning organization” mean? *The learning organization*.
- Osman, I., Reni, A., Mardiana, R., Baumassepe, A. N., & Bon, A. T. (2019). The role of academics’ organizational commitments on their extra role behavior in academic contexts. International Conference on Industrial Engineering and Operations Management Pilsen, Czech Republic.
- Othman, N., Mujir, S. J. M., & Ibrahim, M. S. (2010). Multi-dimensional leadership orientation of academic department heads and lecturer commitment in Malaysian polytechnics. *Procedia-Social and Behavioral Sciences*, 9, 1607-1611.
- Ouakouak, M. L., & Ouedraogo, N. (2019). Fostering knowledge sharing and knowledge utilization. *Business Process Management Journal*, 25(4), 757-779.
- Pallant, J. (2020). *SPSS Survival Manual: A step by step guide to data analysis using IBM SPSS* (7th ed.). Open University Press.
- Pan, B., Shen, X., Liu, L., Yang, Y., & Wang, L. (2015). Factors associated with job satisfaction among university teachers in northeastern region of China: A cross-sectional study. *International journal of environmental research and public health*, 12(10), 12761-12775.
- Pangil, F., & Nasurdin, A. M. (2019). Assessing the relationship between organisational commitment and knowledge sharing behavior. *Malaysian Management Journal*, 13(1), 35-50.
- Paulo, S. S. (2015). *An investigation of job satisfaction among secondary school teachers: The case study of Babati town council*
- Pensieri, C. (2019). The Senge’s fifth discipline in schools. A literature review. *ITALIAN JOURNAL OF EDUCATIONAL RESEARCH*(22), 75-112.
- Pham, L., & Pham, L. (2016). The effects of job satisfaction and organizational commitment on intention to stay: Case study at the universities, colleges in Bac Lieu City, Bac Lieu Province. *10th International Days of Statistics and Economics, Prague*, 8-10.
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59(5), 603.

- Pradhan, S., & Pradhan, R. K. (2015). An empirical investigation of relationship among transformational leadership, affective organizational commitment and contextual performance. *Vision, 19*(3), 227-235.
- Pucciarelli, F., & Kaplan, A. (2016). Competition and strategy in higher education: Managing complexity and uncertainty. *Business Horizons, 59*(3), 311-320.
- Ramadian, A., Eliyana, A., Hamidah AD, B., & Rakawuri, R. (2020). The effect of compensation strategy implementation on knowledge sharing through affective commitment and psychological contracts. *Systematic Reviews in Pharmacy, 11*(9), 699-712.
- Ramjeawon, P. V., & Rowley, J. (2017). Knowledge management in higher education institutions: enablers and barriers in Mauritius. *The learning organization, 366-377*.
- Rathakrishnan, T., Imm, N. S., & Kok, T. K. (2016). Turnover intentions of lecturers in private universities in Malaysia.
- Reese, S., & Yusuf, S. (2018). A view of the learning organization from a practical perspective: Interview with Michael Marquardt. *The learning organization, 25*(5), 353-361.
- Reeves, P. M., Pun, W. H., & Chung, K. S. (2017). Influence of teacher collaboration on job satisfaction and student achievement. *Teaching and Teacher Education, 67*, 227-236.
- Ren, X., & Caudle, D. J. (2020). Balancing academia and family life: The gendered strains and struggles between the UK and China compared. *Gender in Management: An International Journal, 35*(2), 141-165.
- Robbins, S. P., & Judge, T. (2017). *Organizational behavior* (17 ed.). Pearson.
- Rubio, D. M., Berg-Weger, M., Tebb, S. S., Lee, E. S., & Rauch, S. (2003). Objectifying content validity: Conducting a content validity study in social work research. *Social work research, 27*(2), 94-104.
- Rus, C. L., Chirică, S., Rațiu, L., & Băban, A. (2014). Learning organization and social responsibility in Romanian higher education institutions. *Procedia-Social and Behavioral Sciences, 142*, 146-153.
- Sadler, D. (2015). The challenges facing Chinese higher education and why they matter. *Report for Observatory for Borderless Higher Education*.
- Sahito, Z., & Vaisanen, P. (2017). Factors affecting job satisfaction of teacher educators: Empirical evidence from the Universities of Sindh Province of Pakistan. *Journal of Teacher Education and Educators, 6*(1), 5-30.

- Sakiru, O. K., Ismail, I. A. B., Samah, B. A., & Temitope, A. B. (2018). Relationship between leadership styles and organizational commitments among lecturers in public universities: Job satisfaction as mediating variable. *Humanities And Social Science (IOSR-JHSS)*, 23(3), 45-53.
- Salas, E., Tannenbaum, S. I., Kraiger, K., & Smith-Jentsch, K. A. (2012). The science of training and development in organizations: What matters in practice. *Psychological science in the public interest*, 13(2), 74-101.
- Saner, T., & Eyüpoğlu, Ş. Z. (2012). The age and job satisfaction relationship in higher education. *Procedia-Social and Behavioral Sciences*, 55, 1020-1026.
- Sari, R. L., & Seniati, A. N. L. (2020). The role of job satisfaction as mediator between work-life balance and organizational commitment among lecturers. *PSYCHOLOGY AND EDUCATION*, 57(2), 106-110.
- Scales, A. N., & Brown, H. Q. (2020). The effects of organizational commitment and harmonious passion on voluntary turnover among social workers: A mixed methods study. *Children and Youth Services Review*, 110, 104782.
- Schmitt, N. W., Highhouse, S. E., & Weiner, I. B. (2013). *Handbook of psychology: Industrial and organizational psychology, Vol. 12*. John Wiley & Sons Inc.
- Senge, P. M. (1990). *The fifth discipline: The art and practice of organizational learning*. New York.
- Senge, P. M. (2014). *The fifth discipline fieldbook: Strategies and tools for building a learning organization*. Currency.
- Senge, P. M. (2017). *The leaders new work: Building learning organizations* (pp. 51-67). Routledge.
- Serrat, O. (2017). Building a learning organization. In *Knowledge solutions* (pp. 57-67). Springer.
- Sewang, A. (2016). The influence of leadership style, organizational culture, and motivation on the job satisfaction and lecturer's performance at College of Darud Dakwah Wal Irsyad (DDI) at West Sulawesi. *International Journal of Management and Administrative Sciences (IJMAS)*, 3(05), 08-22.
- Shen, H. J., Basri, R., & Asimiran, S. (2018). Relationship between job stress and job satisfaction among teachers in private and international school in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 8, 12.
- Shen, J., & Li, T. (2020). The new engineering education in China based on 207 new engineering research and practice projects. 2020 ASEE Virtual Annual Conference Content Access,

- SHIFT. (2018, April 19). *The true cost of not providing employee training*. SHIFT eLearning. <https://www.shiftelearning.com/blog/the-true-cost-of-not-providing-employee-training>
- Shoshani, A., & Eldor, L. (2016). The informal learning of teachers: Learning climate, job satisfaction and teachers' and students' motivation and well-being. *International Journal of Educational Research*, 79, 52-63.
- Shrotryia, V. K., & Dhanda, U. (2019). Content validity of assessment instrument for employee engagement. *Sage Open*, 9(1), 2158244018821751.
- Sidney L. (2019 May 19) *Sourth morning china post*.China economy <https://www.scmp.com/economy/china-economy/article/3009538/brain-drain-chinas-rust-belt-exacerbated-economic-decline>
- Smyth, R., Nielsen, I., Zhai, Q., Liu, T., Liu, Y., Tang, C., Wang, Z., Wang, Z., & Zhang, J. (2011). A study of the impact of environmental surroundings on personal well-being in urban China using a multi-item well-being indicator. *Population and Environment*, 32(4), 353-375.
- Soltani, M., & Haji, K. A. A. (2016). A cross-level model of organizational commitment antecedents.
- Soomro, B. A., & Shah, N. (2019). Determining the impact of entrepreneurial orientation and organizational culture on job satisfaction, organizational commitment, and employee's performance. *South Asian Journal of Business Studies*.
- Song, J. H., Chai, D. S., Kim, J., & Bae, S. H. (2018). Job performance in the learning organization: The mediating impacts of self- efficacy and work engagement. *Performance Improvement Quarterly*, 30(4), 249-271.
- Song, J. H., Joo, B. K., & Chermack, T. J. (2009). The dimensions of learning organization questionnaire (DLOQ): A validation study in a Korean context. *Human resource development quarterly*, 20(1), 43-64.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences*. SAGE Publications.
- Starner, T. (2020). *How COVID-19 will redefine workplace flexibility forever*. Human Resource Executive. Retrieved August 28 from <https://hrexecutive.com/how-covid-19-will-redefine-workplace-flexibility-forever/>
- Starnes, B. J., & Truhon, S. A. (2006). A primer on organizational commitment. *Human Development and Leadership Division*.

- Stello, C. M. (2011). Herzberg's two-factor theory of job satisfaction: An integrative literature review. Unpublished paper presented at The 2011 Student Research Conference: Exploring Opportunities in Research, Policy, and Practice, University of Minnesota Department of Organizational Leadership, Policy and Development, Minneapolis, MN,
- Stephens, N. M., Hamedani, M. G., & Destin, M. (2014). Closing the social-class achievement gap: A difference-education intervention improves first-generation students' academic performance and all students' college transition. *Psychological science*, 25(4), 943-953.
- Styles, J. K., & Knowles, L. J. (2020). Why become a learning organization: Measuring the dimensions of learning at the University of the Bahamas. *Journal of Higher Education Theory and Practice*, 20(4), 69-87.
- Subiyakto, B., & Widyanti, R. (2020). Revitalizing public university innovativeness through learning organization. *Polish Journal of Management Studies*, 21, 369-381.
- Suma, S., & Lesha, J. (2013). Job satisfaction and organizational commitment: The case of Shkodra municipality. *European Scientific Journal*, 9(17).
- Sutanto, E. M. (2017). The influence of organizational learning capability and organizational creativity on organizational innovation of Universities in East Java, Indonesia. *Asia Pacific Management Review*, 22(3), 128-135.
- Swales, S. (2002). Organizational commitment: A critique of the construct and measures. *International journal of management reviews*, 4(2), 155-178.
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics* (7th ed.). Pearson Boston, MA.
- Tai, T. D., Singh, H., & Hieu, V. M. (2020). Factors affecting lecturers' commitment to their university—A study in Ho Chi Minh City, Vietnam. *Journal of Talent Development and Excellence*, 12(2s), 2007-2023.
- Tan, C. N.-L. (2016). Enhancing knowledge sharing and research collaboration among academics: the role of knowledge management. *Higher Education*, 71(4), 525-556.
- Tan, L.-P., Choong, Y.-O., & Choe, K.-L. (2020). Does anyone care about support inside the university? the mediating role of perceived organisational support. *International Journal of Business and Society*, 21(2), 824-836.
- Tang, S.-Y., Lo, C. W.-H., & Fryxell, G. E. (2003). Enforcement styles, organizational commitment, and enforcement effectiveness: an empirical study of local environmental protection officials in urban China. *Environment and Planning A*, 35(1), 75-94.

- Taroreh, J. (2016). The effects of organizational culture, learning organization, empowerment, and organizational commitment on the performance of SMEs (A case study of SMEs in the Regency of South Minahasa). *Journal of Business and Management (IOSR-JBM)*, 18(8), 59-64.
- Tenzin, K., Dorji, T., Choeda, T., & Pongpirul, K. (2019). Impact of faculty development programme on self-efficacy, competency and attitude towards medical education in Bhutan: a mixed-methods study. *BMC medical education*, 19(1), 1-12.
- Tian, A., Lee, A., & Willis, S. (2018). When empowering employees works, and when it doesn't. *Harvard Business Review*.
- Ting, S.-C. (2011). The effect of internal marketing on organizational commitment: job involvement and job satisfaction as mediators. *Educational Administration Quarterly*, 47(2), 353-382.
- Tolentino, R. C. (2013). Organizational commitment and job performance of the academic and administrative personnel. *International journal of Information technology and Business Management*, 15(1), 51-59.
- Torres, D. G. (2019). Distributed leadership, professional collaboration, and teachers' job satisfaction in US schools. *Teaching and Teacher Education*, 79, 111-123.
- Tosey, P., Visser, M., & Saunders, M. N. (2012). The origins and conceptualizations of 'triple-loop' learning: A critical review. *Management Learning*, 43(3), 291-307.
- Tran, V. D. (2015). Effects of gender on teachers' perceptions of school environment, teaching efficacy, stress and job satisfaction. *International Journal of Higher Education*, 4(4), 147-157.
- Trevitt, C., Steed, A., Du Moulin, L., & Foley, T. (2017). Leading entrepreneurial e-learning development in legal education. *The learning organization*.
- Tsang, E. W. (1997). Organizational learning and the learning organization: a dichotomy between descriptive and prescriptive research. *Human relations*, 50(1), 73-89.
- Tsounis, A., Sarafis, P. Validity and reliability of the Greek translation of the Job Satisfaction Survey (JSS). *BMC Psychol* 6, 27 (2018). <https://doi.org/10.1186/s40359-018-0241-4>
- Tutik, W. (2019). The effect of job satisfaction on organizational commitment and work discipline: A study of foundation permanent lecturers in Stie Yapan Surabaya *Russian Journal of Agricultural and Socio-Economic Sciences*, 95(11).
- Ucar, R., & Dalgic, S. (2021). relationship between school principals' strategic leadership characteristics and school teachers' organizational commitment levels. *Eurasian Journal of Educational Research*, 91, 105-126.

- Uhl-Bien, M., Osborn, R. N., & Schermerhorn, J. R. (2013). *Organizational behavior*. John Wiley & Sons.
- Van Saane, N., Sluiter, J. K., Verbeek, J., & Frings-Dresen, M. (2003). Reliability and validity of instruments measuring job satisfaction—a systematic review. *Occupational medicine*, 53(3), 191-200.
- Vandenberghe, C., & Bentein, K. (2009). A closer look at the relationship between affective commitment to supervisors and organizations and turnover. *Journal of occupational and organizational psychology*, 82(2), 331-348.
- Việt, V. V. (2015). Demographic factors affecting organizational commitment of lecturers. *VNU Journal of Science: Education Research*, 31(4).
- Visser, M. (2007). Deutero-learning in organizations: A review and a reformulation. *Academy of Management review*, 32(2), 659-667.
- Voolaid, K., & Ehrlich, Ü. (2017). Organizational learning of higher education institutions: the case of Estonia. *The learning organization*.
- Wan, Y. (2006). Expansion of Chinese higher education since 1998: Its causes and outcomes. *Asia Pacific Education Review*, 7(1), 19-32.
- Wang, C., & Qin, T. (2020). *How Covid-19 is transforming Chinese Education*. O. Wyman. <https://www.mmc.com/insights/publications/2020/march/how-covid-19-is-transforming-chinese-education.html>
- Wang, J. J. (2020). How managers use culture and controls to impose a '996' work regime in China that constitutes modern slavery. *Accounting & Finance*, 60(4), 4331-4359.
- Wang, Q., Weng, Q., & Jiang, Y. (2018). When does affective organizational commitment lead to job performance? Integration of resource perspective. *Journal of Career Development*, 0894845318807581.
- Wang, G. X., & Rashid, A. M. (2022). Job satisfaction as the mediator between a learning organization and organizational commitment among lecturers. *job satisfaction as the mediator between a learning organization and organizational commitment among lecturers*, 11(2), 847-858.
- Wang, X., & Yang, B. (2007). The culture of learning organizations in Chinese state-owned and privately-owned enterprises: An empirical study. *Frontiers of Business Research in China*, 1(2), 275-299.

- Wang, X., Yang, B., & McLean, G. (2007). Relationships among organizational learning culture, organizational commitment, and job satisfaction: Evidence from Chinese enterprises. In *Universities Forum for Human Resource Development (UFHRD) 2007*. <https://www.ufhrd.co.uk/wordpress/wangxyangb-and-mcleang-relationships-among-organizational-learning-culture-organizational-commitment-and-job-satisfaction-evidence-from-chinese-enterprises/>
- Watkins, K. E., & Kim, K. (2018). Current status and promising directions for research on the learning organization. *Human resource development quarterly*, 29(1), 15-29.
- Watkins, K. E., & Marsick, V. J. (1993). *Sculpting the learning organization: Lessons in the art and science of systemic change*. ERIC.
- Watkins, K. E., & O'Neil, J. (2013). The dimensions of the learning organization questionnaire (the DLOQ) a nontechnical manual. *Advances in developing human resources*, 15(2), 133-147.
- Weale, S., & Pidd, H. (2019). University strike: Tens of thousands of staff walk out across UK. *The Guardian*. <https://www.theguardian.com/education/2019/nov/25/university-strike-staff-walk-out-uk-pay-pensions>
- WeiBo, Z., Kaur, S., & Jun, W. (2010). New development of organizational commitment: A critical review (1960-2009). *African Journal of Business Management*, 4(1), 012-020.
- Wenquan, L., Liluo, F., & Zhican, Z. (2002). Research on Chinese employees' organizational commitments. *Social Science in China*, 23(3), 59-67.
- White, C., Vanc, A., & Stafford, G. (2010). Internal communication, information satisfaction, and sense of community: The effect of personal influence. *Journal of Public Relations Research*, 22(1), 65-84.
- Win, S. (2020). Job satisfaction and organizational commitment of academic staff of public universities in Yangon. *Journal of the Myanmar Academy of Arts and Science*, 18(8), 13-27.
- Xia, W., Li, B., & Yin, S. (2020). Identification of influencing factors for sustainable development: Evaluation and management of regional innovation performance in Heilongjiang, China. *Sustainability*, 12(7), 2739.
- Yang, B., Watkins, K. E., & Marsick, V. J. (2004). The construct of the learning organization: Dimensions, measurement, and validation. *Human resource development quarterly*, 15(1), 31-55.

- Yazici, S., & Karabag, A. (2019). Organizational culture, learning organization and innovation in German Higher Education Institutions. Learning organization and innovation in German Higher Education Institutions (November 18, 2019). IACCM CONFERENCE,
- Yilmaz, E., & Kilic, Y. (2017). The impact of organizational commitment on trainee teachers' job satisfaction. *International Journal of Contemporary Educational Research*, 4(1), 1-11.
- Yu, B. (2013). The influence study of transformational leadership in university on teacher's organizational commitment: The construction and verification of a theoretical model. *Canadian Social Science*, 9(4), 126-137.
- Zagladi, A. N., Hadiwidjojo, D., & Rahayu, M. (2015). The role of job satisfaction and power distance in determining the influence of organizational justice toward the turnover intention. *Procedia-Social and Behavioral Sciences*, 211, 42-48.
- Zaraket, W., Garios, R., & Malek, L. A. (2018). The impact of employee empowerment on the organizational commitment. *International Journal of Human Resource Studies*, 8(3), 284-299.
- Zhang, J. J., Lam, E. T., Bennett, G., & Connaughton, D. P. (2003). Confirmatory factor analysis of the spectator decision-making inventory (SDMI). *Measurement in physical education and exercise science*, 7(2), 57-70.
- Zhang, L. (2015). Do academics' personality traits contribute to their organizational commitment? *Journal of Individual Differences*.
- Zhang, L., & Jing, L. (2016). Organisational commitments and teaching styles among academics in mainland China. *Educational Psychology*, 36(3), 415-430.
- Zhang, Z. (2009). An analysis on the turnover of college teachers in China from the perspective of institutional economics. *International Education Studies*, 2(1), 39-41.
- Zhou, S., & Li, X. (2021). Does organizational commitment buffer the relation between work-to-family conflict and emotional exhaustion in chinese preschool teachers? *Early Education and Development*, 1-14.
- Zhu, C., & Engels, N. (2014). Organizational culture and instructional innovations in higher education: Perceptions and reactions of teachers and students. *Educational Management Administration & Leadership*, 42(1), 136-158.