

Structural Modeling of the Impact of Entrepreneurial Thinking and Professional Commitment on Professors' Effectiveness with the Mediating Role of Satisfaction from Organizational Climate among Professors of Islamic Azad University of Urmia Branch

Article info

Article Type:

Original Research

Authors:

Nahida Ghaffarshoja¹
Roghayeh Vahdat Borashan^{2*}
Mohammad Hassani³

Article Cite:

Ghaffarshoja N, Vahdat Borashan R, Hassani M. Structural Modeling of the Impact of Entrepreneurial Thinking and Professional Commitment on Professors' Effectiveness with the Mediating Role of Satisfaction from Organizational Climate among Professors of Islamic Azad University of Urmia Branch. Curriculum Research, 2022;2(4): 39-49

Article History:

Received: 2021/04/19
Accepted: 2021/07/06
Published: 2021/10/01

Affiliations:

1. PhD Student, Department of Educational Sciences, Urmia Branch, Islamic Azad University, Urmia, Iran.
2. Assistant Professor, Department of Educational Sciences, Urmia Branch, Islamic Azad University, Urmia, Iran. rgh.vahdat@yahoo.com
3. Professor, Department of Educational Sciences, Faculty of Literature and Humanities, Urmia University, Urmia, Iran.

Abstract

Purpose: Regarded to the importance of professors' effectiveness, the purpose of this study was structural modeling of the impact of entrepreneurial thinking and professional commitment on professors' effectiveness with the mediating role of satisfaction from organizational climate among professors of Islamic Azad University of Urmia Branch.

Methodology: This study in terms of purpose was applied and in terms of implementation method was cross-sectional from type of quantitative. The research population was the professors of the Islamic Azad University of Urmia Branch in the 2020-21 academic years, which based on the Cochran's formula the sample size was estimated 227 people who were selected by stratified random sampling method according to different colleges. The research instruments of the present study were the Questionnaires of entrepreneurial thinking (Scarborough & Zimmerer, 1990), professional commitment (Allen & Meyer, 1990), professors' effectiveness (Salimi & Ramezani, 2014) and satisfaction from organizational climate (Bontis, 1998). Data were analyzed by structural equation modeling in SPSS-21 and SmartPLS-2 software.

Findings: The results showed that entrepreneurial thinking and professional commitment had a positive and direct effect on satisfaction from organizational climate and professors' effectiveness and satisfaction from organizational climate had a positive and direct effect on professors' effectiveness. Also, entrepreneurial thinking and professional commitment had a positive and indirect effect on the professors' effectiveness with the mediating role of satisfaction from organizational climate ($P < 0.01$).

Conclusion: According to the results of this research, to improve the professors' effectiveness can be used by promoting entrepreneurial thinking, professional commitment and satisfaction from organizational climate.

Keywords: Entrepreneurial Thinking, Professional Commitment, Professors' Effectiveness, Satisfaction from Organizational Climate, Professors.

Introduction

Iran's higher education system has faced numerous challenges and issues in the past two decades, and the quantitative expansion of universities, the plurality of diverse educational institutions, the increase in the number of students, the lack of effectiveness of professors, and sometimes the existence of a large number of unemployed graduates are among the challenges of higher education and one of the main missions. The university is to improve the quality of teaching and the effectiveness of professors (Ghaffarshoja, Vahdat Borashan & Hassani, 2021). Effective professors are trainers who take steps in the direction of knowledge transfer, the ability to deepen and change in the cognitive, emotional and functional areas of students in the direction of transcendental goals (Dialameh, 2020). Today, some researchers in the field of higher education focused on the effectiveness of professors, and this issue is especially important because the effectiveness of professors should be analyzed and explained according to various sources and the views of the participants in the teaching and learning process, which are professors and students. Based on the interpretation of information, a more comprehensive and accurate picture was obtained for teaching planning (Faridi, 2017). Various definitions have been presented about effectiveness, including the fact that effectiveness is the degree of achievement of goals and the successful completion of the mission. Therefore, effective teachers must have the knowledge and skills needed to achieve goals and be able to use it at the right time and in the desired and expected manner (Dialameh, 2020).

One of the variables that can be investigated about the effectiveness of professors is entrepreneurial thinking, which is a multifaceted phenomenon and an entrepreneur is a person who establishes and manages a business with the aim of profit and economic growth (Rivas & Husein, 2022). Due to its interdisciplinary nature, entrepreneurship is composed of sciences with an objective nature such as financial sciences, physics, etc. and sciences with a subjective nature such as anthropology, sociology, psychology, etc. (Liu, Nandhakumar & Zachariadis, 2018). In recent decades, entrepreneurship with the process of creating and pursuing innovative opportunities to produce value in society as a tool and mechanism for economic and social development has been studied and paid attention to by researchers and policy makers (Brown, Wood & Scheaf, 2022). Entrepreneurial thinking is a process during which organizations identify environmental opportunities regardless of limitations and provide innovative services and products to meet the needs of society in line with sustainable development. Without having an entrepreneurial mindset, it is not possible to provide the conditions and platform in the organization so that a person or group can achieve mobility and transformation (Ghaffarshoja et al, 2021). Having an entrepreneurial mindset is the only solution that organizations can adopt to achieve additional income, improve internal processes, and develop innovative solutions to address social and economic needs (Muller, Berger & Gutzwiller-Helfenfinger, 2020).

One of the variables that can be examined about professors' effectiveness is professional commitment, which as a psychological situation refers to someone's attitude towards their profession and how to perform activities related to that profession (Lestari, Izzati, Adhe & Indriani, 2021). In another definition, professional commitment is defined as a sense of identity, belief in organizational goals and values, and dependence on a job and profession, which shows the interest and desire to continue working in a profession (Perry, Hunter & Currall, 2016). This construct represents professional concerns and preoccupations, honesty, loyalty, conscientiousness, communication, recognition, beliefs, ethics, inner satisfaction, professional growth and professional engagement (Eren & Rakicioglu-Soylemez, 2021). People with high professional commitment have a strong belief in accepting career and professional goals, a high willingness to exert considerable effort at work, and a strong desire to maintain membership in their profession and organization (Malik, Shahzad, Raziq, Khan, Yusaf & Khan, 2019).

One of the possible mediating variables between entrepreneurial thinking and professional commitment with professors' effectiveness is satisfaction with the organizational climate. Organizational climate is a broad term about employees' perception of the overall environment of the organization and is influenced by the formal and informal organization and the personality of the employees and the leader of the organization (Pomirleanu, Gustafson & Townsend, 2022). In another definition, Samzani atmosphere is defined as a set of internal characteristics of the organization that differentiates organizations from each other and affects the behavior of the employees and the leader of the organization (Al-Kurdi, El-Haddadeh & Eldabi, 2020). Organizational climate is related to determining the measurable characteristics of the work environment, which are perceived directly or indirectly by those who work in this environment, and affect the motivation and behavior of the organization's employees, and dissatisfaction with the organizational climate causes increased stress in employees and burnout.

Becomes a job (Li, Yang, Xiao, Wiley, Chen, Liao & et al, 2021). Satisfaction with the organizational atmosphere increases employees' trust in each other, improves their morale, and of course increases their efficiency, productivity and effectiveness (Adeniji, Salau, Awe & Oludayo, 2018).

Few researches have been done about the relationships between entrepreneurial thinking, professional commitment, satisfaction with the organizational atmosphere and professors' effectiveness. For example, the results of Sanchez's (2022) research indicated a positive and significant relationship between professional commitment and organizational climate. Ghaffarshoja et al (2021) concluded that entrepreneurial thinking and professional commitment had a direct and significant effect on professors' effectiveness. In another study, Bashir (2019) reported that professional commitment had a direct and significant effect on the effectiveness of training. The research results of Berberoglu (2018) showed that organizational climate had a positive and significant relationship with organizational commitment and organizational performance. Aminbeidokhti & Ghorbani (2015) concluded that there was a positive and significant relationship between spiritual intelligence and professional ethics with the effectiveness of managers. In another study, Kavosi, Khammarnia, Ghanbari Jahromi, Haghayeghi & Kassani (2014) reported that there was a positive and significant relationship between organizational climate and employee entrepreneurship. The research results of Rasouliazad & Ahmadi (2014) indicated a positive and significant relationship between the organizational atmosphere and the entrepreneurial spirit of librarians. Hoseini & Afshar (2011) concluded that there was a positive and significant relationship between the development of entrepreneurship and the effectiveness of education. In another research, Hashemi, Darvish Pourmaragheh & Hemati (2010) reported that there was a positive and significant relationship between organizational commitment and organizational climate. Belausteguigoitia, Patlan, Navarrete & Mercedes (2007) concluded that organizational climate had an effective role on entrepreneurial orientation.

Considering the many challenges that the higher education system is facing today, it is very important and necessary to check the effectiveness of professors. Because the effectiveness of professors can play an effective role in reducing the challenges of the higher education system and cause the reduction of the unemployed educated class. Therefore, it is necessary to conduct many researches about the effectiveness of professors to increase their effectiveness and to design programs in this field. Another important point is that very little research has been done on the effectiveness of professors, and no research has been done to investigate the effect of entrepreneurial thinking variables and professional commitment with the mediating role of organizational climate satisfaction, and it is hoped that by conducting this research and similar researches, an effective step can be taken to improve the effectiveness of the professors and of course the reduction of the unemployment rate in the society. As a result, the aim of this research was to structurally model the effect of entrepreneurial thinking and professional commitment on the effectiveness of professors with the mediating role of organizational climate satisfaction among professors.

Methodology

This research was applied in terms of purpose and cross-sectional in terms of quantitative type. The research community of professors of Islamic Azad University of Urmia branch in the academic year of 2019-2019 was 550 people, and based on Cochran's formula, the sample size was determined as 227 people, who were selected by stratified random sampling method according to different faculties. In the method of stratified random sampling, the sample size in each faculty was selected according to the size of the faculty community and for this purpose, 66, 54, 50, 32, and 25 people were selected from the faculties of humanities, basic sciences, technical engineering, veterinary medicine, nursing, and midwifery, respectively. They were randomly selected as samples.

The research implementation process was such that after the approval of the proposal and the necessary coordination with the officials of the Islamic Azad University of Urmia branch and its faculties, the statistics of the professors were prepared by the faculties and after determining the appropriate sample size from each of the faculties, a code was assigned to each of the professors. Allocated and the number mentioned above was randomly selected from different faculties. For the samples, the importance and necessity of the research was stated and they were reassured about the observance of ethical points, and they were asked to fully answer all the items of the questionnaires of the current research that are introduced below.

Entrepreneurial Thinking Questionnaire: This questionnaire was designed by Scarborough & Zimmerer (1990) with 10 items, for each item there were five options from completely disagree (score 1) to completely agree

(score 5). The score of the entrepreneurial thinking questionnaire is calculated through the total score of the items, and accordingly, the minimum score is 10 and the maximum score is 50, and a higher score indicates more entrepreneurial thinking. They confirmed the face and content validity of the tool and reported its reliability higher than 0.70 with Cronbach's alpha method in several studies. In the current research, the content validity of the entrepreneurial thinking questionnaire was checked and confirmed by experts, university professors and expert experts, and its reliability was obtained using Cronbach's alpha method of 0.83.

Professional Commitment Questionnaire: This questionnaire was designed by Allen & Meyer (1990) with 24 items, and each item had five options from completely disagree (score 1) to completely agree (score 5). The score of the professional commitment questionnaire is calculated through the total score of the items, and accordingly, the minimum score is 24 and the maximum score is 120, and a higher score indicates more professional commitment. They investigated the construct validity of the instrument with the method of exploratory factor analysis and the results indicated the existence of three factors: emotional commitment, continuous commitment and normative commitment, and the reliability of its factors was reported to be higher than 0.70 using Cronbach's alpha method. In the present study, the content validity of the professional commitment questionnaire was checked and confirmed by experts, university professors and expert experts, and its reliability was obtained using Cronbach's alpha method of 0.87.

Questionnaire of professors' effectiveness: This questionnaire was designed by Salimi & Ramezani (2014) with 35 items, for each item there were five options from completely disagree (score 1) to completely agree (score 5). The score of the professors' effectiveness questionnaire is calculated through the total score of the items, and accordingly, the minimum score is 35 and the maximum score is 175, and a higher score indicates more effectiveness of the professors. They investigated and confirmed the construct validity of the tool with exploratory factor analysis and reported its reliability in several studies with Cronbach's alpha method higher than 0.86. In the current research, the content validity of the professors' effectiveness questionnaire was checked and confirmed by experts, university professors and expert experts, and its reliability was obtained using Cronbach's alpha method of 0.93.

Organizational climate satisfaction questionnaire: This questionnaire was designed by Bontis (1998) with 42 items, and there were five options from completely disagree (score 1) to completely agree (score 5) to answer each item. The score of the organizational atmosphere satisfaction questionnaire is calculated through the total score of the items, and based on this, the minimum score is 42 and the maximum score is 210, and a higher score indicates more satisfaction with the organizational atmosphere. They reviewed and confirmed the content of the tool with the opinion of experts and reported its reliability with Cronbach's alpha method of 0.89. In the present study, the content validity of the organizational atmosphere satisfaction questionnaire was checked and confirmed by experts, university professors and expert experts, and its reliability was obtained using Cronbach's alpha method of 0.93.

Finally, after collecting the data with the above tools, they were analyzed by the structural equation modeling method in SPSS-21 and SmartPLS-2 software.

Findings

In this research, among the 227 people who answered the questionnaires, there were 25 missing questionnaires, and for this purpose, another 25 people were sampled from the community according to the faculties, and they were asked to answer the questionnaires. Therefore, the analysis of the current research was done for 227 people. The results of the correlation matrix of entrepreneurial thinking, professional commitment, satisfaction with the organizational atmosphere and the effectiveness of the professors of the Islamic Azad University of Urmia branch were presented in Table 1.

Table 1. The results of the correlation matrix of entrepreneurial thinking, professional commitment, satisfaction with the organizational climate and the effectiveness of the professors of the Islamic Azad University of Urmia branch.

Variable	Entrepreneurial thinking	professional committment	Satisfaction with the organizational atmosphere	Effectiveness of professors
Entrepreneurial thinking	1			
professional committment	**0.53	1		
Satisfaction with the organizational atmosphere	**0.55	**0.54	1	
Effectiveness of professors	**0.59	**0.68	**0.60	1

According to the results of Table 1, there was a positive and significant correlation between the variables of entrepreneurial thinking, professional commitment, satisfaction with the organizational atmosphere and the effectiveness of the professors of the Islamic Azad University of Urmia branch ($P < 0.01$). Examining the assumptions of structural equation modeling showed that in addition to the existence of sufficient correlation between the variables, the assumption of normality for all variables based on the values of the Kolmogorov-Smirnov test due to significance greater than 0.05 and based on the skewness and kurtosis values due to being in the range +2 to -2 confirmed. The results of the fit indicators of the model of the effect of entrepreneurial thinking and professional commitment on the effectiveness of professors with the mediating role of satisfaction with the organizational atmosphere among the professors of the Islamic Azad University of Urmia branch were presented in Table 2.

Table 2. The results of fit indicators of the model of the effect of entrepreneurial thinking and professional commitment on the effectiveness of professors with the mediating role of satisfaction with the organizational atmosphere among the professors of the Islamic Azad University of Urmia branch.

Variable	Index Q2	Share value	Index R2	Index GOF
Entrepreneurial thinking	0.69	0.55	0.51	
professional committment	0.55	0.50	0.84	
Satisfaction with the organizational atmosphere	0.54	0.53	0.65	0.61
Effectiveness of professors	0.67	0.54	0.67	

According to the results of Table 2, the value of Q2 index above 0.35 indicates a strong predictive relationship, therefore, in the present study, the endogenous variables had a strong predictive capability of the model. Also, the value of R2 index higher than 0.36 indicates a strong determination coefficient, so in the current study, the variables had a suitable determination coefficient. In addition, the GOF index with a value of 0.61 indicated a strong overall fit of the model. The results of the model of the effect of entrepreneurial thinking and professional commitment on the effectiveness of professors with the mediating role of satisfaction with the organizational atmosphere among the professors of the Islamic Azad University of Urmia branch in the form of standard coefficients in Figure 1 and in the form of t-value in Figure 2 and the results of direct and indirect effects in Table 3 was presented.

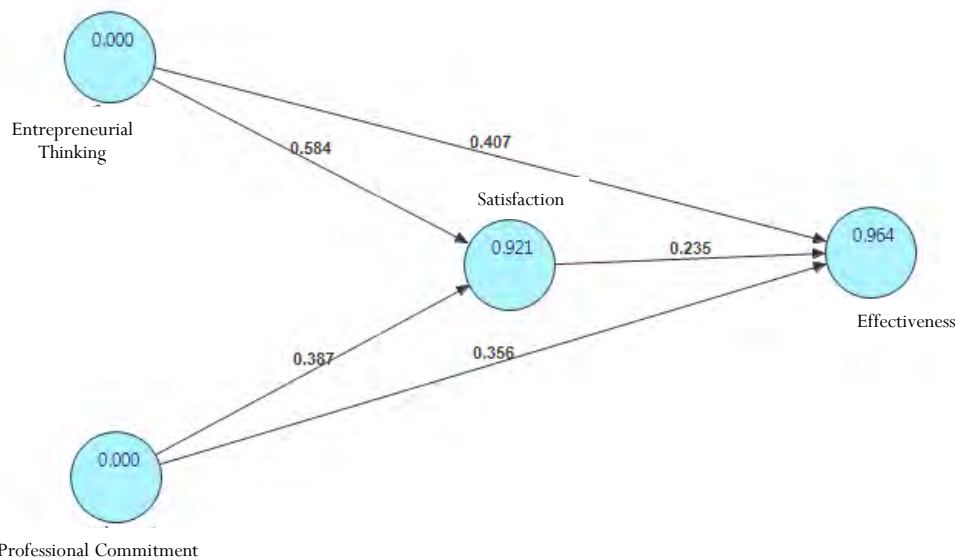


Figure 1. The results of the model of the effect of entrepreneurial thinking and professional commitment on the effectiveness of professors with the mediating role of satisfaction with the organizational atmosphere among the professors of the Islamic Azad University of Urmia branch in the form of standard coefficients

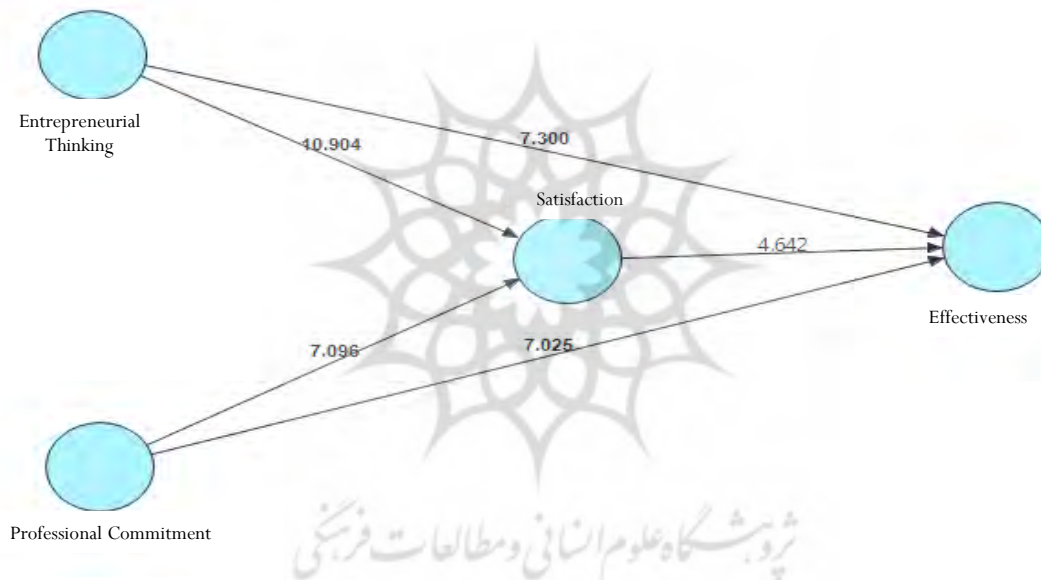


Figure 2. The results of the model of the effect of entrepreneurial thinking and professional commitment on the effectiveness of professors with the mediating role of satisfaction with the organizational climate among professors of the Islamic Azad University of Urmia branch in the state of T value

Table 3. The results of direct and indirect effects in the model of the effect of entrepreneurial thinking and professional commitment on the effectiveness of professors with the mediating role of satisfaction with the organizational atmosphere among the professors of the Islamic Azad University of Urmia branch.

Effect	statistics		
	Standard coefficient	The value of T	meaningful
The direct effect of entrepreneurial thinking on organizational climate satisfaction	0.584	904/10	P<0.01
The direct effect of entrepreneurial thinking	0.407	300/7	P<0.01

on professors' effectiveness			
The direct effect of professional commitment on organizational climate satisfaction	0.387	7/096	P<0.01
The direct effect of professional commitment on professors' effectiveness	0.356	025/7	P<0.01
The direct effect of organizational climate satisfaction on professors' effectiveness	0.235	642/4	P<0.01
Indirect effect	Effect size	Sobel value	meaningful
The indirect effect of entrepreneurial thinking on professors' effectiveness through the mediation of satisfaction with the organizational climate	0.106	0.232	P<0.01
The indirect effect of professional commitment on professors' effectiveness with the mediation of organizational climate satisfaction	0.090	680/3	P<0.01

According to the results of Figures 1 and 2 and Table 3, entrepreneurial thinking and professional commitment had a positive and direct effect on satisfaction with the organizational climate and the effectiveness of professors, and satisfaction with the organizational climate had a positive and direct effect on the effectiveness of professors. Also, entrepreneurial thinking and professional commitment had a positive and indirect effect on the effectiveness of professors with the mediating role of organizational climate satisfaction ($P<0.01$).

Conclusion

Today, the higher education system is facing many challenges and it seems that the effectiveness of professors can play an effective role in reducing these challenges. As a result, the aim of this research was to structurally model the effect of entrepreneurial thinking and professional commitment on the effectiveness of professors with the mediating role of organizational climate satisfaction among professors.

The findings of this research showed that entrepreneurial thinking had a positive and direct effect on the satisfaction with the organizational atmosphere and the effectiveness of the professors of the Islamic Azad University of Urmia branch. These findings in the context of the impact of entrepreneurial thinking on satisfaction with the organizational atmosphere with the findings of the researches of Kavosi et al (2014), Rasouliazad & Ahmadi 2014) and Belausteguigoitia et al (2007) and in the context of the impact of entrepreneurial thinking on the effectiveness of professors with the findings of the researches of Ghaffarshoja et al. (2021) and Hoseini & Afshar (2011) were aligned. In the explanation of these findings, it can be said that entrepreneurial thinking and having fresh and new ideas, taking advantage of facilities and opportunities by relying on knowledge, profession and work related to it and accepting risk. In fact, entrepreneurial thinking is a process during which organizations and organizational employees identify environmental opportunities despite

the limitations and provide innovative services and products to meet the needs of society in line with sustainable development. Entrepreneurial thinking and entrepreneurial actions can provide conditions and a platform in the organization so that individuals or groups who want to go through the process of intra-organizational entrepreneurship can implement it quickly, easily and effectively, and through having entrepreneurial thoughts and actions, they can be stimulated and encouraged. And become trainers for themselves and other colleagues to carry out entrepreneurial activities in the organization, all of which can affect the satisfaction of the organizational atmosphere and the effectiveness of professors. As a result, it is logical that entrepreneurial thinking can have a meaningful, positive and direct effect on satisfaction with the organizational atmosphere and the effectiveness of professors of Islamic Azad University of Urmia branch.

Other findings of this research showed that professional commitment had a positive and direct effect on satisfaction with the organizational climate and the effectiveness of professors of Islamic Azad University, Urmia branch. These findings are in the context of the impact of professional commitment on satisfaction with the organizational atmosphere with the findings of Sanchez (2022), Berberoglu (2018) and Hashemi et al (2010) and in the context of the impact of professional commitment on the effectiveness of professors with the findings of Ghaffarshoja et al (2021) research. Bashir (2019) and Aminbeidokhti & Ghorbani (2015) were aligned. In the explanation of these findings, it can be said that the university professors have gradually become attached to their organization due to the benefits and advantages that the organization has for them and they have the desire to continue being a member of the organization. In fact, the three factors of belief in the goals and values of the organization, willingness to work hard and deep desire as effective components on the professional commitment to continue being a member of the organization for professors and affect the satisfaction of the organizational atmosphere and the effectiveness of professors. Another important point is that professional commitment represents the intangible assets and capital of the organization, and the commitment of professors is considered an effective and strong force for the success of the organization, and professional commitment is an attitude about the loyalty of employees to the organization and a continuous process that without it and through the participation of people in Organizational decisions depend on organizational success, and a high sense of professional commitment reduces absenteeism, absenteeism, and reluctance, and increases organizational health, organizational citizenship behavior, and organizational productivity. As a result, it can be expected that professional commitment can have a meaningful, positive and direct effect on satisfaction with the organizational atmosphere and the effectiveness of the professors of the Islamic Azad University of Urmia branch.

Other findings of this research showed that satisfaction with the organizational atmosphere had a positive and direct effect on the effectiveness of the professors of Islamic Azad University, Urmia branch. No research was found regarding the effect of satisfaction with the organizational climate on the effectiveness of research professors, but in explaining this finding, it can be said that the satisfaction with the organizational climate is affected by all aspects of the organization and affects the conduct and behavior of all organizational employees, including professors. These effects can increase motivation or weaken it, which in any case has a role in the performance of human resources. Satisfaction with the organizational climate can increase a huge part of the organization's capital and the efforts of competent employees to achieve the level of organizational productivity. Because the environment of any organization can be accompanied by an atmosphere that may be warm and friendly or cold and unbearable. As a result, it seems logical that satisfaction with the organizational climate can have a significant, positive and direct effect on the effectiveness of the professors of Islamic Azad University of Urmia branch.

In addition, the findings of this research showed that entrepreneurial thinking and professional commitment had a positive and indirect effect on the effectiveness of professors with the mediating role of organizational climate satisfaction. No research was found on the effect of entrepreneurial thinking and professional commitment on the effectiveness of professors with the mediating role of satisfaction with organizational climate, but in explaining these findings, it can be said that there are human and structural capitals among professors, along with organizational views, formal actions and methods. And informally, values and beliefs and work environment exist among professors as criteria of organizational climate and were institutionalized. Satisfaction with the organizational climate among professors consists of two collaborative and innovative practices, and when the university offers a high level of innovative aspects, professors tend to increase their interaction with others to exchange and facilitate knowledge to create new topics, and as a result Raise an innovative social atmosphere among the members of the organization and influence the effectiveness. Also, the collaborative aspect in the

university creates a reason for the desire of most members of that organization to work together as a group and in the direction of each other's growth and promotion. Another important point is that the effect of entrepreneurial thinking and professional commitment on organizational climate satisfaction is significant and significant, and the effect of organizational climate satisfaction on professors' effectiveness is significant and significant, and the mediating variable of organizational climate satisfaction is part of the effect of independent variables (entrepreneurial thinking and professional commitment) has depended on the dependent variable (professors' effectiveness) and has been able to be a suitable mediator between independent and dependent variables. As a result, it can be expected that satisfaction with organizational climate is a suitable mediator between entrepreneurial thinking and professional commitment with the effectiveness of professors at Islamic Azad University of Urmia, and the variables of entrepreneurial thinking and professional commitment can have a meaningful, positive and positive effect on the effectiveness of professors through satisfaction with organizational climate. Put indirectly.

This research was a cross-sectional research that was conducted on the professors of the Islamic Azad University of Urmia branch regardless of their gender or academic rank, so caution should be observed in generalizing its results and findings. Therefore, it is suggested that this research be conducted on professors of Islamic Azad Universities of other units and even professors of public and Payam Noor universities and its results and findings be compared with the results and findings of this research. Another research proposal is to conduct this research separately on male and female professors, or even according to university grades, and compare their results and findings. Another research suggestion is to examine the model of the effect of entrepreneurial thinking and professional commitment on professors' effectiveness with the mediation of other variables, including organizational citizenship behavior. According to the results and findings of this research, it is possible to improve the effectiveness of professors by promoting entrepreneurial thinking, professional commitment and satisfaction with the organizational atmosphere. The practical suggestion is that teaching and learning become a culture in the university, and in order to achieve this, one should start from the professors and cultivate professors who are loyal to the organization. Another practical suggestion is to consider creativity and innovation, ability to create knowledge, having current knowledge, knowledge of new and diverse teaching methods, and familiarity with information and communication technology in the university's recruitment program. The last suggestion is that the conditions should be provided so that all professors can use the facilities and opportunities of the university to conduct research and in this field the university does not withhold its financial, educational, psychological, etc. support from the professors.

Acknowledgments

With the utmost courtesy and respect, we express our gratitude to all the people who have helped during this research, including respected university professors and university colleagues.

References

- Adeniji A, Salau O, Awe K, Oludayo O. (2018). Survey datasets on organisational climate and job satisfaction among academic staff in some selected private universities in Southwest Nigeria. *Data in Brief*, 19, 1688-1693.
- Al-Kurdi O, El-Haddadeh R, Eldabi T. (2020). The role of organisational climate in managing knowledge sharing among academics in higher education. *International Journal of Information Management*, 50, 217-227.
- Allen NJ, Meyer JP. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*. 63(1), 1-18.
- Aminbeidokhti A, Ghorbani M. (2015). Effective improvement plan of managers using spiritual intelligence and professional ethics. *Journal of Strategic Management Studies*, 6(23), 137-159.
- Bashir L. (2019). To study the influence of professional commitment on teaching effectiveness among secondary school teaching. *Research Guru: Online Journal of Multidisciplinary Subjects*, 12(4), 424-432.
- Belausteguigoitia I, Patlan J, Navarrete J, Mercedes M. (2007). Organizational climate as antecedent of commitment, effort and entrepreneurial orientation in Mexican family and non-family. *Revista de Centro de Investigacion*, 7(27), 5-24.
- Berberoglu A. (2018). Impact of organizational climate on organizational commitment and perceived organizational performance: empirical evidence from public hospitals. *BMC Health Services Research*, 18(399), 1-9.
- Bontis N. (1998). Intellectual capital: An exploratory study that develops measures and models. *Management Decision*, 36(2), 63-76.
- Brown AR, Wood MS, Scheaf DJ. (2022). Discovery sells, but who's buying? An empirical investigation of entrepreneurs' technology license decisions. *Journal of Business Research*, 144, 403-415.
- Dialameh N. (2020). Recognizing the Competence Components of Effective University Professors from the Viewpoint of Islamic Guidelines (An Approach Toward Islamic Revolution University). *Iranian Journal of Management in the Islamic University*, 8(18): 295-314.
- Eren A, Rakicioglu-Soylemez A. (2021). Pre-service teachers' professional commitment, sense of efficacy, and perceptions of unethical teacher behaviours. *Australian Educational Researcher*, 48(2), 337-357.
- Faridi M. (2017). The relationship of between the professor teaching with students' research self-efficacy and self-directed learning. *Teaching and Learning Research*, 13(2): 75-86.
- Ghaffarshoja N, Vahdat Borashan, Hassani M. (2021). Structural modeling of impact of entrepreneurial thinking and professional commitment on professors' effectiveness and the mediating role of intellectual resources among the professors of Urmia Islamic Azad University. *Jundishapur Education Development Journal*, 11(4): 672-685.
- Hashemi SA, Darvish Pourmaragheh S, Hemati A. (2010). Investigating the relationship between organizational climate with organizational commitment and teachers' morale in middle schools of girls' schools in Marvdasht. *Quarterly Journal of Educational Leadership & Administration*, 4(4), 165-187.
- Hoseini SH, Afshar M. (2011). A study on relationship between effectiveness of education and entrepreneurship development case study: Entrepreneur firms- Hamedan. *Urban Management Studies*, 3(4), 15-26.
- Kavosi Z, Khammarnia M, Ghanbari Jahromi M, Haghayeghi F, Kassani A. (2014). The relationship between organizational climate and employee entrepreneurship in Motahari Hospital, Jahrom, 2013. *Sadra Medical Journal*, 2(4), 369-387.
- Lestari GD, Izzati UA, Adhe KR, Indriani DE. (2021). Professional commitment: Its effect on kindergarten teachers' organizational citizenship behavior. *Cypriot Journal of Educational Sciences*, 16(4), 2037-2048.
- Li H, Yang Y, Xiao LD, Wiley JA, Chen H, Liao L, et al. (2021). Quality of care in Hunan Province nursing homes: relationship to staffing and organizational climate. *Geriatric Nursing*, 42(2), 427-432.
- Liu J, Nandhakumar J, Zachariadis M. (2018). When guanxi meets structural holes: Exploring the guanxi networks of Chinese entrepreneurs on digital platforms. *The Journal of Strategic Information Systems*, 27(4), 311-334.
- Malik OF, Shahzad A, Raziq MM, Khan MM, Yusaf S, Khan A. (2019). Perceptions of organizational politics, knowledge hiding, and employee creativity: The moderating role of professional commitment. *Personality and Individual Differences*, 142, 232-237.

- Muller S, Berger G, Gutzwiller-Helfenfinger E. (2020). Establishing entrepreneurial thinking and acting in Swiss vocational colleges. *Discourse and Communication for Sustainable Education*, 11(2), 121-136.
- Perry SJ, Hunter EM, Currall SC. (2016). Managing the innovators: Organizational and professional commitment among scientists and engineers. *Research Policy*, 45(6), 1247-1262.
- Pomirleanu N, Gustafson BM, Townsend J. (2022). Organizational climate in B2B: A systematic literature review and future research directions. *Industrial Marketing Management*, 105, 147-158.
- Rasouliazad MR, Ahmadi P. (2014). The relationship between organizational climate and entrepreneurial spirit of librarians in Universities of Shiraz. *Journal of Educational Management Innovations*, 9(1), 34-54.
- Rivas DF, Husein S. (2022). Empathy, persuasiveness and knowledge promote innovative engineering and entrepreneurial skills. *Education for Chemical Engineers*, 40: 45-55.
- Salimi J, Ramezani G. (2014). Identifying the components of effective teaching and evaluating the teaching situation (Case study of Kurdistan University of Applied Sciences). *Journal of Educational Measurement & Evaluation Studies*, 4(8), 33-61.
- Sanchez OP. (2022). Influence of professional commitment and organizational climate on the work engagement of employees in the department of education. *International Journal of Scientific Research and Management*, 10(1), 2971-2998.
- Scarborough NM, Zimmerer T. (1990). *Effective small business management*. Pennsylvania State University: Merrill Publishing Company.

