To Improve Organizational Effectiveness of the Private University in China by Optimizing the Organizational Structure through Organization Development Interventions

An Action Research Study of Zhejiang Yuexiu University of Foreign Languages in China

Wenmei Shi[1]   Seongdok Kim[2]
[1]Professor, Department of Principal's Office
Zhejiang Yuexiu University of Foreign Languages, People's Republic of China
Corresponding author   Email: 113244342@qq.com
[2]Lecturer, Graduate School of Business, Assumption University, Thailand
Email: seongdokkim@gmail.com

Abstract

This study aimed to use organization development interventions to improve the organizational effectiveness by optimizing organization structure of Zhejiang Yuexiu University of Foreign Languages in China. This current research focused on four main sub-dimensions: standardization, centralization/decentralization, specialization, and integration of organizational structure. Both quantitative and qualitative methods were utilized with questionnaire, interview and observation. Quantitative data was collected to examine the change in level of standardization, centralization/decentralization, specialization and integration of organizational structure and organizational effectiveness. Qualitative data was collected to obtain in-depth understanding on the result of organization development interventions on the organization structure. The results of paired sample t-test indicated significant differences between pre- and post-ODI results in organizational structure and organizational effectiveness. Based on the Pearson Correlation results, organizational structure had a positive relationship with organizational effectiveness. The deliberated ODIs had positive effect on the level of organizational structure and organizational effectiveness. According to the results of multiple linear regressions, centralization/decentralization, specialization, and integration have an influence on organizational effectiveness. Standardization has no influence on organizational effectiveness. Further research in the related fields were recommended in the last section.

Keywords: organization structure, organization effectiveness, organization development interventions, action research, Chinese private university

Introduction

With the globalization, political integration,   and network informatization, the complexity and uncertainty of the education is growing (Mao, 2013). Private universities are facing more market uncertainty and higher operation risk. Organizational structure plays a

very important role in organizations，the primary factor determining human behavior in an organization is organizational structure (Owens, 1987). The researcher organized the preliminary diagnosis questionnaire with 304 teachers and 7389 students' participation and conducted the preliminary in-depth interviews with 70 teachers and students. The SWOT, SOAR and STAR Model analysis of the private university current situation of organization development in ZYUFL showed a weaker organizational effectiveness and a lower organization structure which requires appropriate interventions to improve the situation. Therefore, the current study aims to initiate the study of organizational effectiveness and organization structure from the perspective of organization development.

The research objectives of this study are:

1. To assess and analyze the current organizational structure and organizational effectiveness
2. To design and implement appropriate organization development interventions (ODIs) to effectively optimize the organizational structure
3. To examine the differences of organizational structure and effectiveness between the pre- and post-ODI phases
4. To investigate the causal relationship between organizational structure and effectiveness

Literature Review

In this section, there are three aspects of literature review, namely, organization change and organization development, organizational structure, and organizational effectiveness. The structure of the literature review was designed to fulfill the research objectives of the current study.

Literature Review of Organization Change and Organization Development

Deep organization reform and change is an irreversible trend of the times (Li, 2005). Organization development should also address a wide range of topics, including the role of change, methods of organization change and various factors that affect the successful implementation of organization development (Cummings &Worley, 2008).The theory of organization change originates from the research field of organization development. It has been studied for more than 60 years.

There are three typical models of organization change: Lewin's (1952) change model, action research model and some contemporary change methods. In the following Figure 1, there is a clear comparison among the three models. The common point that the three models share is their emphasis on preliminary diagnosis before taking actions and on evaluation after taking actions. In addition, all these three models empower members to participate in the

action research and they all encourage dialogues between the consultant and the organization members. But Levin's model distinguishes itself from the other two by paying attention to the large picture, in another world, the general process of action research.

Literature Review of Organizational Structure

After a lot of literature review, this study adopted the definition made by Minzberg (1979): organizational structure is defined simply as the sum of the ways in which it divides its labor into distinct tasks and then achieves coordination among. Compared to functional organizational structure, business department organizational structure, matrix organizational structure, horizontal structure, virtual network structure and other forms. This study focuses more on internal and hidden structural definition, such as standardization, specialization, centralization/decentralization ,and integration.

Differentiation and Integration

Lawrence and Lorsch (1986) conducted research in the manufacturing department, research center and sales department of 10 organizations and then put forward two dimensions of organizational structure: differentiation and integration. Their research concluded that organizations perform better when the levels of differentiation and integration match the level of uncertainty in the environment.

Structural Contingency

The contingency theory became the mainstream organization theory from the latter period of 1960s to the middle period of 1970s. The main representatives are Kast and Rosenzweig (1973). This theory emphasizes that organizational structure design should adapt to the needs of the environment. There is no best organizational structure, only the most appropriate organizational structure.

Five Organizational Structure Types

Mintzberg (1979) considered that organization was composed of five parts: strategic apex, operating core, middle line, techno-structure and supporting staff. Mintzberg (1979) put forward five standard organizational structures through analysis of organizations, i.e. simple structure, machine bureaucracy, professional form, divisional form and adhocracy. He thought that universities are professional institution, grassroots personnel are professional technicians and intellectuals, who have considerable control over their own work.

Learning Organization

Since the end of 1960s, "learning" organization emerged different from "telling" organization taking "telling" and "order" as organization core. What's learning organization?

Senge summarized it as one sentence that was "organization that can make all levels of personnel be involved and be able to constantly learn". To establish learning organization, Senge raised five disciplines: personal mastery, system thinking, building shared vision and team learning.

Literature Review of Organizational Effectiveness

Organizational effectiveness is the extent by which organization achieves its goals (Daft, 2010).   Daft (2010) summarizes four methods for evaluating organizational effectiveness (Figure 4). As an open system, an organization obtains resource inputs from the environment, then turns these resources into products and transfers them to the environment. These four approaches focus on different parts of the organization: resource-based approach, internal process approach, goal approach, strategic stakeholder approach. The evaluation indicators involve output, input, internal process, and key stakeholders, that is strategic stakeholders.

In this current study, the goal approach and strategic stakeholder approach were adopted to assess the organizational effectiveness. The evaluation method adopts subjective indicators, which are determined by the non-profit characteristics of private universities.

Figure 1

Theoretical Framework
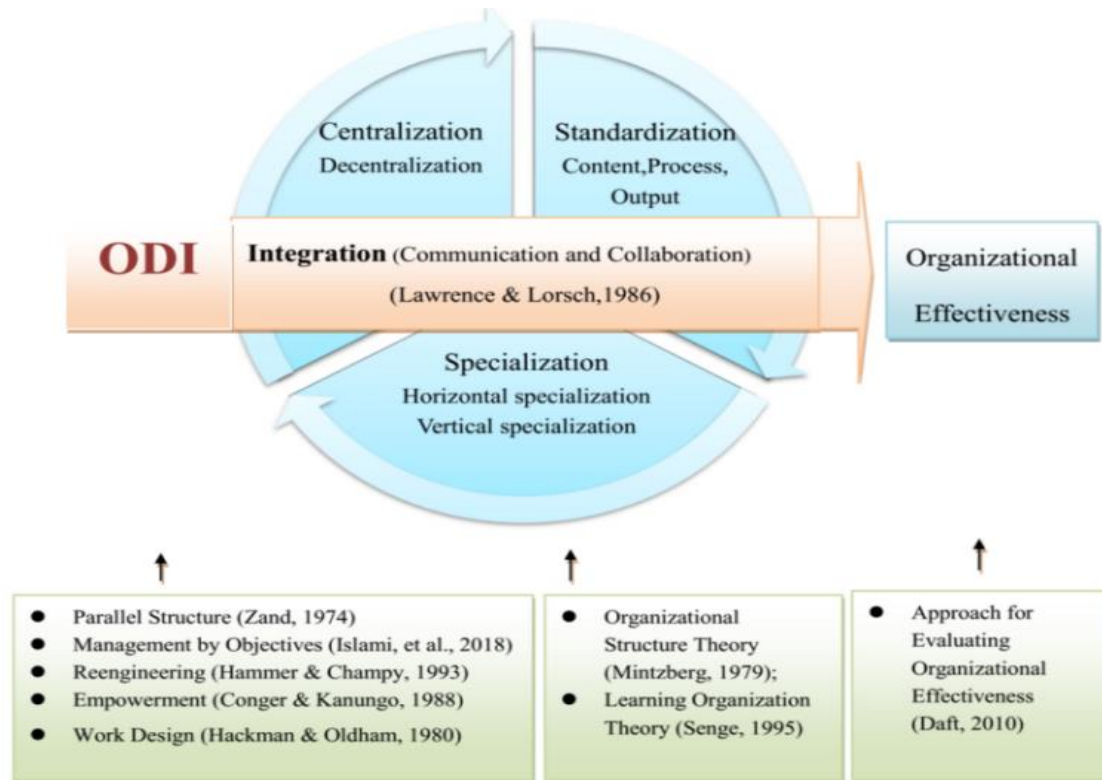
This current study optimizes the organizational structure of ZYUFL through the theories of organization development intervention, such as Parallel Structure (Zand, 1974), Management by Objectives (Islami, et al., 2018), Reengineering (Hammer & Champy, 1993), Empowerment (Conger& Kanungo, 1988) , and Work Design (Hackman & Oldham, 1980).This current study uses Mintzberg's (1979) theory of five organizational structures and the learning organization theory. Under the guidance of these theories, this current research focuses on four main sub-dimensions: standardization, centralization/decentralization, specialization , and integration. Daft (2010) introduced four approaches to measure organizational effectiveness in Organization Theory and Design，which provides evaluation methods for organizational effectiveness.

Conceptual Framework

Figure 2

Conceptual Framework
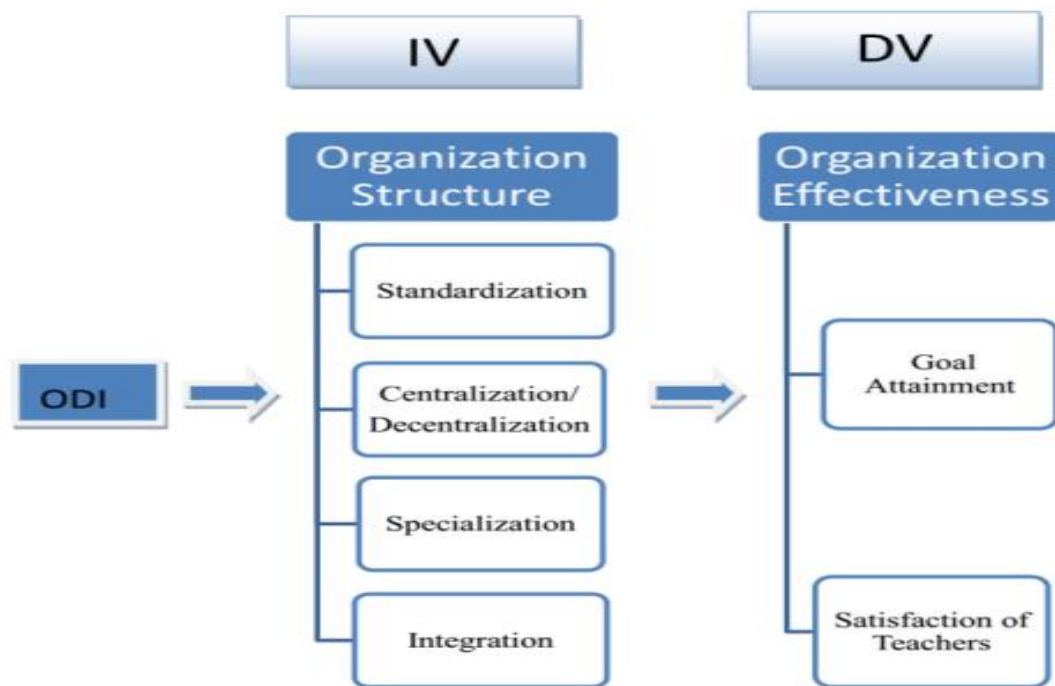
The independent variables are ODI and organizational structure. Through the literature review of the main dimensions of organizational structure, there are four key dimensions proposed: standardization, centralization/decentralization specialization and integration. The dependent variable is organizational effectiveness. As for the specific context of ZYUFL, two sub-dimensions (goal attainment and satisfaction of teachers) are to be measured.

Action Research Framework

Figure 3

Action Research Framework
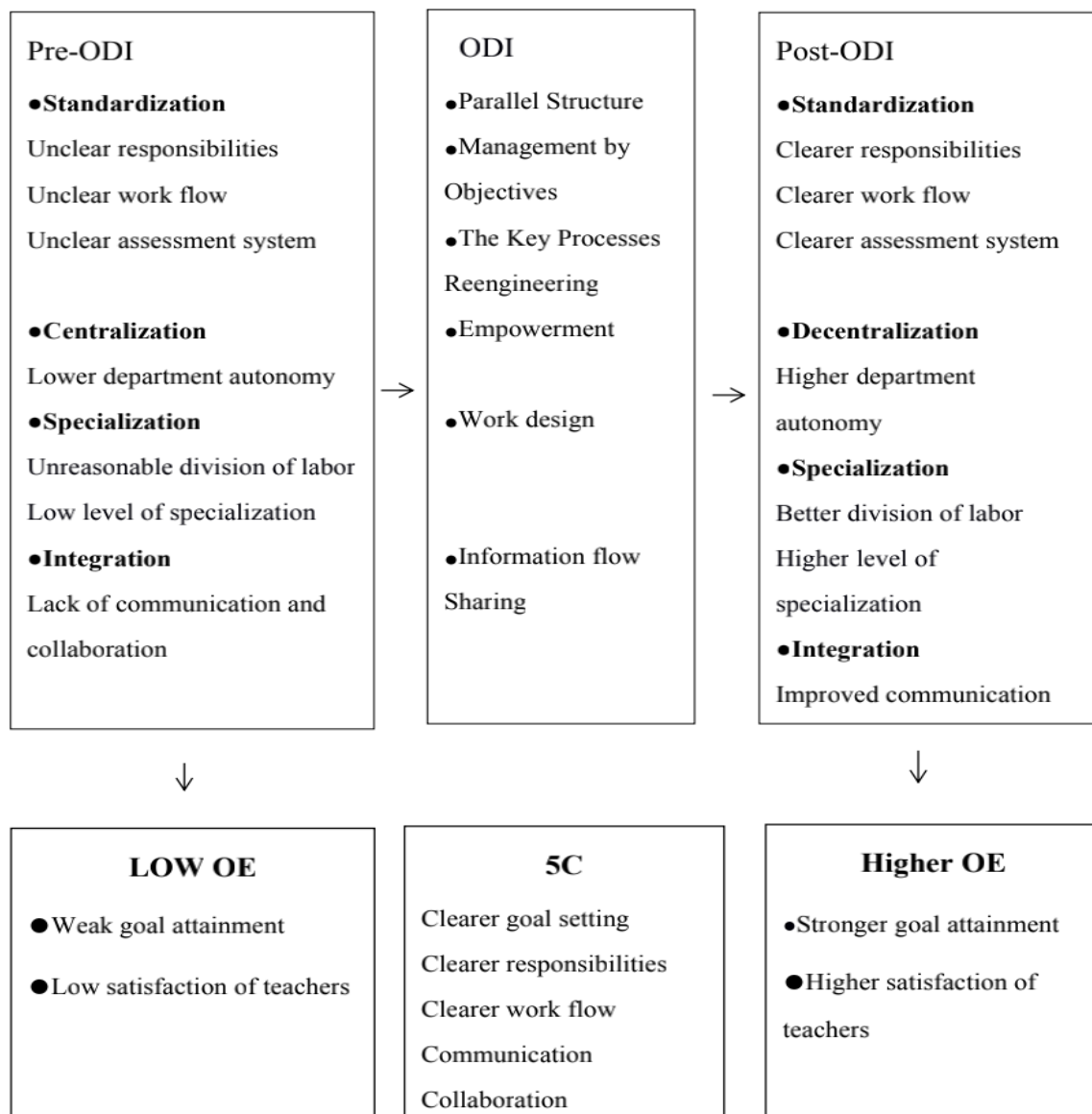
The organization development interventions are to help administrators to learn management by objectives, the key processes reengineering, empowerment, information flow sharing, and work on building a parallel structure.

Finally, in order to clarify job description and individual responsibility, to standardize the work outputs and to establish a more cooperative and communicative mechanism, the

current research built a 5C model (clearer goal setting, clearer responsibilities, clearer work flow, communication and collaboration) to improve organizational structure in ZYUFL for higher organizational effectiveness. It let the organization change from weak goal attainment to stronger goal attainment, from low satisfaction of teachers to higher satisfaction of teachers.

Hypotheses

Ho1: There is no difference of standardization between pre- and post-ODI phases.
Ha1: There is a difference of standardization between pre- and post-ODI phases.
Ho2: There is no difference of centralization/decentralization between pre- and post-ODI phases.
Ha2: There is a difference of centralization/decentralization between pre- and post-ODI phases.
Ho3: There is no difference of specialization between pre- and post-ODI phases.
Ha3: There is a difference of specialization between pre- and post-ODI phases.
Ho4: There is no difference of integration between pre- and post-ODI phases.
Ha4: There is a difference of integration between pre- and post-ODI phases.
Ho5: There is no difference of goal attainment between pre- and post-ODI phases.
Ha5: There is a difference of goal attainment between pre- and post-ODI phases.
Ho6: There is no difference of satisfaction of teachers between pre- and post-ODI phases.
Ha6: There is a difference of satisfaction of teachers between pre- and post-ODI phases.
Ho7:Standardization, centralization/decentralization, specialization, and integration have no influence on organizational effectiveness.
Ha7:Standardization, centralization/decentralization, specialization ,and integration have an influence on organizational effectiveness.

Research Methodology

Participants

Because this current research intervenes in the standardization, centralization/decentralization, specialization and integration of the organizational structure, the optimization of these dimensions involves the main functional departments in ZYUFL. Therefore, the participants of the research are 37 administrators from 15 departments and sections. There are 15 directors of functional department and 22 vice directors of functional. These participants represent each functional department in ZYUFL.

Table 1

Target Respondents

Gender	Number	Percentage
Male	18	49%
Female	19	51%
Total	37	100%

Methods and Instruments

This current research used action research method. This action research adopted a mixed-method approach combining quantitative and qualitative research. The two questionnaires were used to identify organizational structure and organizational effectiveness in pre- and post- ODI stages. Quantitative results were obtained by analyzing the data of questionnaires before and after intervention. Qualitative data were mainly obtained through interviews and observation.

Questionnaires

The questionnaire is adapted from the questionnaire formulated by Miller (1986) and Daft (2010) scale for the measurement of centralization/decentralization; Daft (2010) and Withey (1983) scale for the measurement of standardization; Pugh (1986), Hage and Aiken (1967) scale for the measurement of specialization. Miller (1986) and Zhu (2015) scale for the measurement of integration.

Using the goal approach of evaluating organizational effectiveness (Daft, 2010), the current study focuses on goal attainment and satisfaction of teachers. The goal attachment is mainly evaluated according to the completion of the annual work plan, which is determined by the goal setting function department of the university. The teacher satisfaction questionnaire was utilized to evaluate organizational effectiveness.

Validity and reliability test the two questionnaires were completed. A validity analysis of the Organizational Structure Questionnaire showed the KMO（Kaiser-Meyer-Olkin）value is 0.759. A validity analysis of the Organizational Effectiveness Questionnaire showed that the KMO value is 0.820.A reliability analysis of the Organizational Structure Questionnaire is at .928 (Cronbach α). A reliability analysis of the Organizational Effectiveness Questionnaire is at .972 (Cronbach α) (Nunnaly, 1978).

Interview Guide

Based on the four dimensions of organizational structure and the current situation of organizational effectiveness, the researcher with OEPSC designed interview guide and consulted relevant experts. The researcher organized individual interviews; a total of 10 persons, including the directors of functional department, the staffs of the functional department, the dean of the secondary college and regular teachers, were invited for interviews in pre- and post-ODI phases. The interviews required the five steps: (a) greetings, (b) introducing, (c) asking questions, (d) rephrasing, (e) appreciating (Kvale,1996)

Procedure

Action Research Model was employed in conducting this research which focused on the impact of ODI on organizational structure to improve organizational effectiveness and the causal relationship between organizational structure and organizational effectiveness. The process included three stages: Pre-ODI, ODI and Post-ODI.

Pre-ODI Stage (Preliminary Diagnosis)

At this stage, the problem was clearly identified based on the preliminary diagnosis questionnaire, interviews , and SWOT, SOAR & STAR Model analysis. 200 survey questionnaires were used to measure the perception of respondents on the current situation of organizational structure and organizational effectiveness. The researcher conducted SWOT, SOAR & STAR Model analysis together with the related administrators and teachers. Tailored ODIs were designed to address the problem in consultation with administrators and teachers.

ODI Stage

ZYUFL established a parallel structure—Organizational Effectiveness Promotion Steering Committee (OEPSC) in March 2018，is responsible for overall coordination. Under OEPSC is the Office of Organizational Effectiveness Promotion Steering Committee (OOEPSC) intervention on organizational structure started in April 2018 and ended in December 2019, lasting for 1 year and 9 months, totaling 21 months. The parallel structure and information flow sharing were intervention methods to improve the integration of organizational structure. The target of reengineering, and management by objectives were to improve the standardization of organizational structure. Work design aimed to achieve specialization of organizational structure. Empowerment aimed to achieve the balance of decentralization and centralization of organizational structure.

Table 2

The ODI of Target Variable and Expected Outcome

Target Variable	ODI	Expected Outcome
Integration	Parallel structure	More cross-departmental collaboration
	Information flow sharing	Realization of horizontal and vertical information sharing; Increase the communication
Specialization	Work design	Clearer responsibilities
Standardization	Management by objectives	Clearer goal setting
	The key processes reengineering	Clearer work flow
Centralization/ Decentralization	Empowerment	Higher department autonomy; More involvement of stakeholders

According to Table **,** implementation of intervention activities**.** After the activity is completed, committee and team members summarize the work done, the results achieved, the experience gained, as well as lessons learned,   the inspiration from the work and some ideas for the future exchanged.

Table 3

OEPSC's Main ODI Activities

Activities	The responsibility department	Date &Time
Mobilization Phase		
Parallel structure building ；The first meeting: discussion of the implementation plans; coaching activities; determined the implementation plan and published it.	OEPSC	Mar.27.2018 (3 hours)
Organized and convened the mobilization conference	OEPSC	Mar.29.2018 (2 hours)
Implementation Phase		
Firstly：		
Work shop1--- Presentation of the current situation of implementation	OOEPSC	Apr. 4.2018. (3 hours)
Organized functional departments to publicize service commitments online	Functional departments	Apr. 15.2018. (3 hours)

Organization of the first observation	Discipline inspection office	Apr. 26.2018 (2 hours)
Secondly：		
Work shop 2--- Presentation of the current situation of implementation	OOEPSC	Jun.6.2018 & (2 hours)
The key processes reengineering	Functional departments	Jul.Aug.Sep. 2018
Thirdly：		
Work shop 3---Presentation of the current situation of implementation	OOEPSC	Oct.23.2018 (3 hours)
Construction of information platform	Modern educational technology center	Oct.Nov.Dec. 2018
Widening platform and channel for teachers' and students' participation	Labor Union; Students' Affairs Department; the principal's office	
Fourthly：		
Meeting---Convening a phased summary meeting	OOEPSC	Dec.5.2018 & (3 hours)
Management by Objectives- Organization and formulation of the work objectives of the university and secondary departments in 2019 and sign the work objectives responsibility letter	The personnel office; the principal's office	Mar.7.2019 & (2 hours)
Work design-Clarification of the responsibilities of the departments and administrator	OOEPSC	May.Jun.Jul. 2019
Training course for improving the professional ability of administrators	Teacher development Center	Jul.16-17.2019 &(16 hours)
Fifthly：		
Workshop 4---Presentation of the current situation of implementation	OOEPSC	Sep.19.2019 (2 hours)
Empowerment-Formulation of a pilot project to promote the management of secondary colleges	The principal's office	Oct.Nov. 2019
Implementation of the Annual Work Objectives Assessment of Secondary Departments	The personnel office	Dec. 2019
Summary and analysis Phase		
Meeting--- Convening a Summary Meeting	OOEPSC	Dec.27. 2019 （3 hours）
Organization of the second observation		Jan.18.2020 （ 2 hours）

Post—ODI Stage

The researcher organized the results of intervention and forms a system document. The period is from January 2020 to February 2020.The researcher with OOEPSC organized a questionnaire survey and interview after the intervention, and collected questionnaire survey, internal documents (secondary data), Post-ODI Survey & Interview then conducted data analysis.

During Pre- and Post-ODI, the organizational structure was assessed and the impact of organizational structure on organizational effectiveness was measured and analyzed. Frequency distributions and percentages were employed to measure the demographic data. To measure and compare the improvement of pre- and post-intervention on the outcomes of each variable, paired sample t-tests were used. In order to examine the causal relationship between organizational structure and organizational effectiveness, regression statistics was employed.

Results

Quantitative findings

There were two questionnaires utilized to examine the organization structure and organization effectiveness: questionnaire on the organizational structure and questionnaire on teachers' satisfaction of organization effectiveness.

Ho1: There is no difference of standardization between pre- and post-ODI phases.

Ha1: There is a difference of standardization between pre- and post-ODI phases.

Table 4

The difference of Standardization between Pre- and post-ODI Phases

The standardization of the organizational structure	Pre-ODI	Post-ODI	t-test	
	Mean	Mean	Sig.	Significant
1. I am well aware of the responsibilities of the department	4.23	4.46	.00	Significant
2. I am well aware of my job responsibilities	4.26	4.50	.00	Significant
3. I have rules and regulations to follow in carrying out my work	4.04	4.38	.00	Significant
4. When I perform work, I can follow a clear work flow	4.10	4.33	.00	Significant
5. I think most of the current management processes are clear and simple	3.68	4.23	.00	Significant
6. My department is usually evaluated objectively and fairly	3.75	4.15	.00	Significant
7. My work is usually evaluated objectively and fairly	3.78	4.11	.00	Significant
Overall score	3.98	4.31	.00	Significant

From the above table, there is significant difference of standardization between the pre-ODI and post-ODI stages. Therefore, Ho1 is rejected.

Ho2: There is no difference of centralization/decentralization between pre- and post-ODI phases.

http://www.assumptionjournal.au.edu/index.php/odijournal

Ha2: There is a difference of centralization/decentralization between pre- and post-ODI phases.

Table 2

The Difference of Centralization and Decentralization between Pre- and Post-ODI Phases

The centralization and decentralization of the organizational structure	Mean	Mean	Sig.	
8. I have the opportunity to express my opinions or suggestions on important decisions	3.00	3.76	.00	Significant
9. I can decide that how to do with my responsibilities	3.44	3.94	.00	Significant
10. I am involved in the hiring decisions of my peers	2.83	3.31	.00	Significant
11. I participated in the assessment of employees at the same level	3.34	4.01	.00	Significant
Overall score	3.15	3.76	.00	Significant

From the above table, there is significant difference of centralization and decentralization between the pre-ODI and post-ODI stages. Therefore, Ho2 is rejected.

Ho3: There is no difference of specialization between pre- and post-ODI phases.

Ha3: There is a difference of specialization between pre- and post-ODI phases.

Table 3

The difference of Specialization between Pre- and Post- ODI Phases

The specialization of the organizational structure	Mean	Mean	Sig.	Significant
12. I have sufficient professional knowledge and skills in this position	4.08	4.14	.00	Significant
13. I know my path to promotion and growth	3.58	3.98	.00	Significant
14. There are many job training and learning opportunities that I need	3.71	3.98	.00	Significant
Overall score	3.79	4.03	.00	Significant

From the above table, there is significant difference of specialization between the pre-ODI and post-ODI stages. Therefore, Ho3 is rejected.

Ho4: There is no difference of integration between pre- and post-ODI phases.

Ha4: There is a difference of integration between pre- and post-ODI phases.

Table 4

The Difference of Integration between Pre- and Post-ODI Phases

The integration of the organizational structure	Mean	Mean	Sig.	Significant
15. I often work with executives from other departments across departments	3.94	4.18	.00	Significant
16. I need to participate in some temporary teams with multiple departments for specific projects	3.74	3.91	.00	Significant
17. The information or data I need is generally available through	3.40	4.06	.00	Significant

the university's information sharing platform				
Overall score	3.69	4.05	.00	Significant

From the above table, there is significant difference of integration between the pre-ODI and post-ODI stages. Therefore, Ho4 is rejected.

Ho5: There is no difference of goal attainment between pre- and post-ODI phases.

Ha5: There is a difference of goal attainment between pre- and post-ODI phases.

Organizational effectiveness was measured by two dimensions: one was the goal attainment, which was the completion of work plans; the other was teacher satisfaction. Teachers' satisfaction was the result of teachers' questionnaire, and the goal attainment was scored by the goal setting department according to the completion of the annual goal.

Goal attainment uses secondary objective data to evaluate. According to the 10 quantitative indicators of the University plan in 2018 and 2019, the planning department gave 1-5 points to the degree of completion in 2018 and 2019. 5 = very good completion，4=good completion, 3=average completion, 2=poor completion, 1=very poor completion. The completion in 2018 and 2019 were shown in the table below Table 5.

Table 5

Organizational Effectiveness with Goal Attainment at Pre- and Post-ODI Phase

Project	Completion in 2018 (Pre-ODI)	Completion in 2019 (Post-ODI)	t-test	Significant
	Mean	Mean	Sig.	
1. Economic income	4	5	.00	Significant
2.Number of provincial key specialties	4	4	.00	Significant
3. Provincial first-class discipline	4	4	.00	Significant
4.Projects above provincial and ministerial level	4	4	.00	Significant
5. Number of professors	3	5	.00	Significant
6. Number of doctors	3	4	.00	Significant
7.International cooperation institutions	3	4	.00	Significant
8. Number of exchange students to overseas universities	3	4	.00	Significant
9. Number of awards in competitions of disciplines above provincial and municipal level	4	5	.00	Significant
10. Graduates' satisfaction with the University	2	3	.00	Significant
Overall score	3.4	4.2	.00	Significant

From the above table, there was significant difference of goal attainment between the pre-ODI and post-ODI stages. Therefore, Ho5 is rejected.

Ho6: There is no difference of satisfaction of teachers between pre- and post-ODI phases.

Ha6: There is a difference of satisfaction of teachers between pre- and post-ODI phases.

Table 6

The Satisfaction of Teachers between Pre- and Post-ODI Phases

	Pre-ODI	Post-ODI	t-test	Significant
Teacher's Satisfaction of Organizational Effectiveness	Mean	Mean	Sig.	Significant
1. To what extent are you satisfied with the current clarity of responsibilities of functional departments?	3.22	4.26	.00	Significant
2. To what extent are you satisfied with the rationality of the current rules and regulations?	3.08	4.17	.00	Significant
3. To what extent are you satisfied with the clarity of the overall management process?	3.16	4.09	.00	Significant
4. To what extent are you satisfied with the efficiency of the current functional departments?	3.15	3.95	.00	Significant
5. To what extent are you satisfied with the cooperation of various departments?	3.16	3.92	.00	Significant
6. To what extent are you satisfied with the service of teachers by functional departments?	3.17	4.14	.00	Significant
7. To what extent are you satisfied with the professional level of administrators?	3.20	3.89	.00	Significant
8. To what extent are you satisfied with the access to public information?	3.10	4.37	.00	Significant
9. To what extent are you satisfied with teachers' participation in university management?	3.46	4.10	.00	Significant
10. To what extent are you satisfied with the current development of the university?	3.40	4.42	.00	Significant
Overall score	3.21	4.13	.00	Significant

From the above table, there is significant difference of satisfaction of teachers between the pre- and post-ODI stages. Therefore, Ho6 is rejected.

Ho7:Standardization, centralization/decentralization, specialization and integration have no influence on organizational effectiveness.

Ha7:Standardization, centralization/decentralization, specialization and integration have an influence on organizational effectiveness.

Table 7

Model Summary

Model	Multiple R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.847a	.717	.706	.2224274	2.091

a.Predictors:(Constant), Post standardization, centralization/decentralization, specialization and integration   of organizational structure

b.Dependent Variable: Post organizational effectiveness

Table 8

Regression Coefficients between Standardization, Centralization/decentralization,

Specialization ,Integration and Organizational Effectiveness

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
1	B	Std.Error	Beta		
(constant)	.811	.244		3.320	.001
Post-Standardization	.047	.074	.049	.637	.525
Post-Centralization /decentralization	.099	.046	.137	2.172	.032
Post-Specialization	.159	.077	.183	2.058	.042
Post- Integration	.519	.073	.595	7.116	.000

a.   Dependent Variable :Post organizational effectiveness

From the above table, as the Sig.(p-value) was greater than 0.05 (p>.05), standardization has no influence on organizational effectiveness.

As the Sig. (p-value) was less than 0.05 (p＜.05), centralization/decentralization has an influence on organizational effectiveness.

As the Sig. (p-value) was less than 0.05 (p＜.05), specialization has an influence on organizational effectiveness.

As the Sig. (p-value) was less than 0.05 (p＜.05), integration has an influence on organizational effectiveness.

Ho7 was failed to reject. It can be said that the estimated model could not prove the impact of standardization on organizational effectiveness，but could prove the impact of centralization/decentralization, specialization and integration on

centralization/decentralization, specialization , and integration.

Qualitative findings

Interview and observation were utilized to teachers and executives. Through individual interview and group interview, independent observation and participatory observation, the researcher found that organizational structure and organizational effectiveness changed positively in pre- and post-ODI stages.

The degree of organization standardization has been significantly improved. From the prominent assessment and evaluation problems before the intervention, the workflow was not smooth, and the system implementation, fairness and continuity have made a difference. The university has established the target management assessment method, which closely linked the work target with the secondary unit. In the past year, the researchers have focused on abandoning, modifying, and establishing various systems, and recompiled and printed the latest system compilation in 2020.

The centralization and decentralization of organization were not obvious. The director of college said that she agreed that the current pilot implementation of secondary management has achieved little. The power of the university was still concentrated in the leadership at the university level. Some directors believed that this was related to the ability of the directors of the colleges that needed to be improved. There were also directors who believed that as a private university, it was necessary to centralize and unify decision-making and allocation of resources, which could make management more efficient.

The specialization of the organization has been improved. The staffs said that through the optimization of the management team and the increase of professional training opportunities, the professional titles and academic qualifications of management personnel have been improved. However, there was a phenomenon worthy of attention, which was, in interviews or questionnaires to administrators, employees all believed that they already had the necessary professional skills. In interviews with teachers or questionnaires, teachers were not satisfied with the specialization level of administrators.

The integration of organizational structure has been greatly improved. The director of functional department said，"The university not only formulates the work responsibilities and scope of each department, but also formulates the work contact mechanism between relevant departments and secondary colleges, so the work contact is smooth. Especially in the era of network information, a lot of work has been implemented through the Internet."

In summary, through the analysis of the second-hand materials in the qualitative research, the researchers found that in the past year, through the implementation of various interventions, teachers and students were more optimistic about the future of university development and recognized the changes in the university management.

Conclusion

Optimization of Organizational Structure is an Important Way to Improve Organizational Effectiveness

The organizational structure affected the efficiency of organizational effectiveness, which determined the satisfaction of the teachers to the organization. Through organizational intervention, the standardization, centralization/decentralization, specialization and integration of organizational structure was optimized. It made the organization's objectives clearer, responsibilities clearer, processes clearer, communication better, and participation more. In addition, the organization's objectives were better realized , and the satisfaction of teachers was effectively improved.

After the action research of ZYUFL, it showed that, the higher the degree of integration, centralization/decentralization, and specialization, the stronger the satisfaction of teachers to the organization. The standardization of organizational structure did not impact organizational effectiveness.

'5C' is an Important Content of Organizational Structure Optimization

Many researchers pay attention to the study of organizational structure and get 13 dimensions of organizational structure (Joris et al.，2005; Miller & Droge, 1986；Pugh & Hickson，1968；Robbins, 1983). However, many dimensions also make practitioners unable to start. According to the reality of ZYUFL, this current study focuses on the definition of internal and hidden organizational structure. Build a 5C (clearer goal setting, clearer responsibilities, clearer workflow, communication , and collaboration) organizational structure, to solve the problem of division of labor and cooperation within the organization. That is to say, to grasp the key problems and aspects of the optimization of the organizational structure.

Six Interventions are Effective Tools for Organizational Structure

The biggest embodiment of organizational effectiveness is to achieve the goal of organizational development, so Management by objective is imperative. In the target assessment of colleges and universities, the quantity is relatively less and more qualitative, and the result has a certain degree of lag, which needs to be considered in the process of implementing the target management. Thus, the target management of colleges and universities more reflects a flexible direction.

OEPSC established a process system centered on process and oriented to teachers and students, draw a flow chart and write a process specification, so as to form a flat organizational structure. The goal of the organization reaches teachers and students directly, so as to facilitate the transmission of information and improve the responsiveness of the university to the needs of teachers and students and changes in the market environment.

According to the requirements of the management by objective and process, the current research formulated the responsibility statement of the management by objective position, and defined the qualification, responsibility and authority scope, work objectives and evaluation indicators of each position.

After solving the division of labor problem, cooperation and communication became prominent, so there were five aspects of interventions, and the establishment of parallel structure was the basis of all these, providing organizational guarantee. So the six interventions were based on each other, complementing each other and becoming a whole.

Using Organization Development Method to Overcome Resistance to Change

In this current study, ZYUFL paid more attention to the individual and organizational reasons for resistance to change and overcome the "resistance to change" (Robbins, 1996).For example, the reasons for individual resistance to change: habits, security, economic factors, fear of the unknown, selective information processing; the reasons for organization resistance to change: structural inertia, limited change points, group inertia, threats to professional knowledge, threats to existing power relations, threats to existing resource allocation. The ways to overcome the resistance of change are: to make clear the necessity and importance of change through propaganda; to absorb the extensive participation of organization members to form group power; to reduce the pressure brought by reform to employees through communication; to strengthen training to improve the adaptablity of employees to change; to pay attention to the opportunity of change. Through empathy and support, the reformer looks at problems from the perspective of the other party and "actively listens", effectively communicates, and lets organizational members directly participate in the plan and implementation of change(Robbins, 1996).

Discussion

Discussion on Findings of Organizational Structure

The organizational structure of the university is characterized by democracy and expert control. Its administration is not a bureaucracy, but a service for teachers and students.

The organizational structure of private colleges and universities needs to be flexible and flat as the direction of reform. It can enhance the adaptability of private colleges and universities in the uncertain environment.

In the regression analysis, the integration of organizational structure has the greatest relevance to organizational effectiveness. Therefore, the organizational structure of private colleges and universities should emphasize cooperation and communication, and establish cross functional project groups, teams, and form some matrix organizations.

Discussion on Findings of Organizational Effectiveness

The private universities need to pay attention to the demands of stakeholders. As a

term, stakeholders are defined by scholars as "various groups that can no longer exist without their support". Some scholars believe that according to the close degree between stakeholders and the school, the school's stakeholders can be divided into four levels: the first level is the core stakeholders, including teachers, students, and managers. All the members of private colleges need to establish a mutual support relationship, and everyone feels that they have real common interests in demand value, desire, and goal.

The private universities need to fully respect and empower teachers and administrators. The successful decentralization should ensure that the power is granted to the employees whose knowledge and skills reach a certain level, supplemented by a certain incentive mechanism and an effective information feedback and communication system.

The private universities need to mobilize the enthusiasm of teachers' participation. The positive model has been applied to planned change primarily through a process called appreciative inquiry (AI). As a "reformist and rebellious" form of social constructionism, AI explicitly infuses a positive value orientation into analyzing and changing organizations. It promotes broad member involvement in creating a shared vision about the organization's positive potential. That shared appreciation provides a powerful and guiding image of what the organization could be.

Implication

This current research could contribute to the application of OD to organizational structure development of Chinese private universities and could help to explore the development patterns of private universities. It analyzes main problems and causes during the management of private universities and discusses the innovation strategies of the management system. It is beneficial to the optimization of organizational structure and to the increase of organizational effectiveness.

Moreover, students and teachers could benefit from high-quality management services and their satisfaction expects to be increased. From another aspect, teachers' loyalty to ZYUFL may improve, which can promote the reform and development of ZYUFL in the long run.

As for Private higher education institutions, the current research explores the regular pattern of running private universities and helps to build a scientific development management system. With a flexible and innovative organizational structure, it may be facilitating to achieve development goals through efficient organization management. There is reference significance for study and practice on the OS and OE of Chinese private universities.

For example, under COVID 19 situation, the universities need to standardize the prevention and control procedures; fully believe in the decentralization to the grass-roots managers; the strength of professionals should be strengthened to ensure scientific

prevention, to integrate resources, to achieve better effectiveness of prevention.

Recommendations for Further Research

This current research is only an action research on the local problems of the organizational structure. A further topic worthy of in-depth study and discussion is how to comprehensively and systematically understand and realize the change, like building a systematic and open organizational structure which integrates centralization and decentralization, flattening and flexibility, networking and informatization.

The flexible and innovative organizational structure has always been a very obvious advantage of Chinese private universities compared with Chinese public universities. How to make this advantage continuously stimulate new vitality with the change of environment needs further systematic thinking.

Researchers can also conduct case studies on other universities. According to the typology and stage theory of university organizational structure, different stages have different organizational structure characteristics (Xuan, 2005).What the organizational structure is suitable for is good. Therefore, in the future, researchers can strengthen the case study, so as to find out the common rules and serve the improvement of organizational effectiveness.

References

Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: integrating theory and practice. Academy of Management Review, 13(3), 471-482.

Cummings, T.G., & Worley, C.G. (2008). *Organization Development and Change* (9th ed.). Mason, OH: South-Western College Publishing.

Daft, R. L. (2010). *Organization Theory and Design, Tenth Edition*. South-Western, Cengage Learning

Hackman, J., & Oldham, G. (1980). Work redesign (prentice hall organizational development series).

Hage, J. and Aiken, M. (1967). Relationship of Centralization to Other Structural Properties. Administrative Science Quarterly, 12 (1), 72-92.

Hammer, M., & Champ, J. (1993). *Reengineering the corporation*. New York: Happer Collins.

Islami, X., Mulolli, E., & Mustafa, N. (2018). Using management by objectives as a performance appraisal tool for employee satisfaction. Future Business Journal, 4(1), 94-108.

Joris, M., Maryse, J.B., & Marco, M.(2005).Organizational structure and performance in Dutch Small Firms. Small Business Economics.2005.25(1)

Kast, Fremont E. & James, E. Rosenzweig. (1973). *Contingency Views of Organization and Management.* Chicago: Science Research Associates.

Kotter, J. P. (1996). *Leading change*. Boston: Harvard Business School Press.

Kvale, S. (1996).Interviews an Introduction to Qualitative Research Interviewing, Sage Publications,

Lawrence, P. R., & Lorsh, J. W. (1986). *Organizational Structure and Design*. Homewood, Ila; Irwin and Dorsey.

Lewin, K. (1952). Group decision and social change. In G. E. Swanson, T. M.Newcombe, & E. L. Hartley (Eds.),*Readings in social psychology* (2nd ed.)

Li, F. (2005).The development, comparison and enlightens of the theories of university academic organization overseas. (Doctoral dissertation, Central china normal university).

Mao, W.P. (2013). A Research on innovation of management system of private colleges. Doctoral dissertation, Liaoning normal university.

Miller, D.,& Droge, C.(1986). Psychological and traditional determinants of structure. Administrative Science Quarterly,31(4), 539-560.

Mintzberg, H. (1979). *Structuring of Organization*. Prentice---Hall Inc. Englewood Cliffs,New Jersey.

Nunnaly, J. (1978). *Psychometric theory*. New York McGraw-Hill.

Pugh, D. S. (1973). The measurement of organization structures: does context determine form? Organizational Dynamics,1(4), 19-34.

Robbins, S.P. (1996). *Organization Behavior: Concept, Controversies, Applications*. New Jerser: PrenticeHall.Inc.

Robert, G. O. (1981). *Organizational behavior in education*. Prentice-Hall.

Senge, P. M. (1990). *The Fifth Discipline: The Art and Practice of The Learning Organization*. New York: Doubleday/Currency.

Withey, M., Daft, R.L. and Cooper, W. H. (1983), Measures of Perrow's work unit technology: an empirical assessment and a new scale, Academy of Management Journal, 26, 45-63.

Zand, D. E. (1974). Collateral organization: a new change strategy. Journal of Applied Behavioral Science A Publication of the Ntl Institute,10(1), 63-89.

Zhu, X.W. (2015). *Dynamic Fit: Organizational Structure Theory, Empirical Study and Case*. Beijing: China, Economy & management publishing house.