

*Research Article) July – December 2020)***Research on the content structure of organizational responsiveness of private colleges***Guifang Zhang, Ph.D Candidate in the Business Administration Program,**Chinese Graduate School, Panyapiwat Institute of Management, email:xf19999@163.com**Erming Xu, Lecturer in Chinese Graduate School, Panyapiwat Institute of Management***Abstract**

The content structure of organizational responsiveness of private colleges is an innovative research area. Combining the research results of organizational responsiveness of private colleges in both China and western world and based on the current development of private colleges in China, this paper first defines the content structure of organizational responsiveness of private colleges through interviews, questionnaires and other methods, then forms questionnaires for preliminary test to have an in-depth study on the content structure of organizational responsiveness of private colleges in China, and finally constructs measurement scales for the content structure, testing reliability and validity of the scales.

**Keywords:** *Colleges, organizational responsiveness, Flexible decision-making, Recognition and early-warning, Social relations, Responsive implementation*

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## Literature review

At present, the research on the concept and the content structure of organizational responsiveness has attracted foreign scholars' attention, and related research results have been published in important international journals (Claus, 2005; Timothy, 2005; James & Faizul, 2007; Leonard 11992; Barton, 1995; Teece, Pisnao&Shuen, 1997; Itami, 1992; Eisenhardt& Martin, 2000; H. Elfat&Peteraft 2003). However, up to now, there has been limited domestic research in this area, and no systematic research results has been achieved especially on the content structure of organizational responsiveness. Through the above review of related Chinese and western literature, it can be found that although the research on organizational responsiveness has attracted more and more attention from scholars, there are still limitations and deficiencies in the existing research. For example, western scholars, including C1aus (2003), Timothy (2005), Magali& Michael1 (2006) and James & Faizul (2007), paid attention to the content structure of organizational responsiveness and carried out researches. However, these researches are limited to the content structure of organizational responsiveness and the relationship between the antecedent and the outcome variables in organizational responsiveness has not been further explored.

## Research Purpose

This paper first reviews related literature; then based on the current situation of private colleges in China and through interviews, questionnaires and other methods, this paper define the concept, draws up items and constructs preliminary questionnaires for the content structure of organizational responsiveness of private colleges in China. Moreover, by chooses suitable small sample, this paper tests reliability and validity of the preliminary questionnaires, corrects and completes scale item selection, and forms a large sample questionnaire survey. At last, this paper collects data for the large sample questionnaires, carries out exploratory factor analysis on those accumulated data, and obtains the content structure model of organizational responsiveness of private colleges. The content structure model is validated through confirmatory factor analysis to test the reliability and validity of large sample questionnaire, thus forming a formal questionnaire for the content structure of organizational responsiveness of non-profit organizations, which lays a foundation for the follow-up study of this paper.

## Research steps

As for the preliminary study on the content structure of organizational responsiveness of private colleges, this paper follows the following five steps: (1) this paper reviews existing research literature and defines the concept of organizational response of private colleges based on the theories of non-profit organizations; (2) an interview outline is drawn up; (3) After literature review, interviews and open-ended questionnaires, the items of the content structure of organizational response of private colleges are sorted out; (4) the above research results are summarized and analyzed to form a preliminary questionnaire for content

structure of organizational response of private colleges; (5) The content structure of the organizational response of private colleges is defined by using statistical questionnaire survey and multivariate statistical analysis.

## Research process

### 1. Item selection and forming of preliminary questionnaire for organizational responsiveness of private colleges

At present, research on the organizational responsiveness of private colleges in China is still in its infancy, and there is even no empirical study on the organizational responsiveness of private colleges. Drawing lessons from other scholars' definition of organizational responsiveness and based on the current situation of private colleges in China, this paper constructs a scale for the content structure of organizational responsiveness of non-profit organizations. Accordingly, the specific arrangements in this stage are as follows:

Literature research: Firstly, the paper reviews and analyses the relevant research literature on organizational responsiveness, defines the concept of organizational responses and that of non-profit organizations; secondly, it draws up an outline for interviews on organizational responsiveness of non-profit organizations, and sorts out representative and frequently applied measurement items for the content structure of organizational responsiveness of private colleges through literature review.

In-depth interviews: In-depth interviews are divided into two types. The first type is personal interviews. Through interviewing individual employees of China's private colleges, personal interviews reflect the connotation and concrete embodiment of organizational responsiveness of non-profit organizations.

The study interviewed a total of 15 middle and senior management staff and ordinary employees from five private colleges in southwestern China. The senior management staff included the president of Jinjiang College of Sichuan University, the chairman of Jincheng College of Sichuan University, the president of Sichuan Business College, the chairman of Tianfu College of Southwest University of Finance and Economics, and the president of Chengdu College of University of Electronic Science and Technology. The main reason for choosing management staff of private colleges as interviewees is that the school managers are the main decision-maker of their school, and their job positions determine that they are familiar with operation of private colleges, having a deeper understanding of private college's development, which makes them able to more objectively and comprehensively reflect the content structure of organizational responsiveness of non-profit organizations.

The second type of interview is group interview. The interviewees included middle-level management staff of human resources department of Jinjiang College of Sichuan University and Sichuan Business College.

The interviews were conducted in a semi-open manner, and lasted no more than 2-3 hours each time. At the beginning of the interviews, the researcher first introduced the concept and the content of organizational responsiveness of NPOs. Afterwards, the interviewees were asked to talk about their understanding of the concept of organizational responsiveness of NPOs and the events or behaviors related to organizational responsiveness they observed in daily work. In the interviews, the researcher only made

appropriate guidance for interviewees to figure out what factors the interviewees think would affect the organizational responsiveness of private colleges, and what results the organizational responsiveness may bring to the schools. The interviews provide basis for verifying the hypothesis of this study.

Open-ended questionnaire survey: Literature review is confined to the past research on organizational responsiveness, reflecting past information, while in-depth interviews are confined to interviewees, interview condition and time. Therefore, in order to have a more accurate analysis, it is necessary to carry out open-ended questionnaire survey to collect more realistic items for the research. On the basis of the above work, this paper first defined the concept of organizational responsiveness so as to facilitate the interviewee's understanding. Then it conducted an open-ended questionnaire survey by asking two questions. The detailed design of the questionnaire is attached to the end of the article. The questionnaire survey was conducted in five private colleges in Southwest China and the subjects involved in the research are middle and senior managerial personnel and teachers of the colleges.

In the survey, with 117 pieces of open-ended questionnaires distributed, 93 valid ones were recovered and a total of 378 items were collected. With the 253 items collected from literature review and in-depth interviews, there were 631 items collected in total. After splitting, merging and deleting of repetitive and ambiguous items, 55 items with 2-time frequency were obtained. The 55 items were given to 9 ordinary staff from private colleges to read, and with their suggestions, 6 items were further removed and finally 49 items were kept for the preliminary questionnaire for the content structure of organizational responsiveness of private colleges. The preliminary questionnaire adopted six-point Likert scale, which included choices: “very important”, “important”, “basically important”, “basically unimportant”, “unimportant” and “completely unimportant”.

## 2. Preliminary study

The subjects: Five private colleges in Southwest China were selected as the research subjects. A total of 300 preliminary questionnaires were distributed and 235 valid ones were collected, with valid response rate of 78.33%.

Statistical analysis and tools: this paper uses SPSS24 statistical software, and adopts project analysis, exploratory factor analysis and other statistical analysis methods.

Analysis of the preliminary study result: This paper analyzes the data from preliminary study with item analysis and exploratory factor analysis.

(1) Item analysis includes qualitative and quantitative analysis of items. Qualitative item analysis focus on the content and form of items in a scale, while quantitative item analysis focuses on verifying the quality of the items with statistical methods. By deleting unqualified items with the two kinds of item analysis, the reliability and validity of a scale can be improved (Wu, 2003). Therefore, item analysis is a method to test the reliability and validity of a scale. According to item analysis results, items that do not meet the requirements can be deleted and modified. Generally, item analysis adopts item-total correlation method and the significance test

of mean difference of high score group and lower one. In this paper, the latter method is adopted.

(2) As for exploratory factor analysis, this paper chooses principal component analysis to have varimax rotation. Accordingly, eigen values greater than 1 is used as criterion to extract factors and to determine the number of factors. Besides, the EFA method also follows the following principles: first, if only one factor can be extracted from two items, the factor must be deleted because it lacks internal consistency; second, the load of an item in a factor must be greater than 0.4, which means the item has convergence validity. If not so, the item should be deleted; third, the greater the load of an item in a factor is, the smaller the load of the item in other factors is. Therefore, when the difference of the load of an item between two factors is less than 0.2, the two items are crossed items and should be deleted.

Through factor analysis and theoretical hypothesis, this paper finally determines that the formal questionnaire for content structure of organizational responsiveness of private colleges should include 31 items.

### 3. Model setup

After determining the items, this paper carries out a formal questionnaires survey to construct the model of content structure of organizational responsiveness of private colleges so as to form a measurement tool of organizational responsiveness.

Test samples: In this survey, 1130 questionnaires were distributed to all private colleges in southwestern China over the Internet and 1021 valid ones were collected from 5 private colleges, with the validity rate of 88.4%. Subsequently, 728 questionnaires were selected randomly as test samples of exploratory factor analysis.

Statistical analysis and tools: This study first tests the 31 items in the questionnaire for content structure of organizational responsiveness of private colleges with SPSS 24 statistical analysis software and the six-point Likert scale, which includes the choices of “very consistent”, “consistent”, “basically consistent”, “basically inconsistent”, “inconsistent”, “completely inconsistent”, and then analyzes the data with exploratory factor analysis and correlation analysis.

### Research steps

The Internet questionnaire survey lasted for one month. In the survey, the subjects were clearly informed that they could keep anonymous so that both their work and the school they work for would not be affected. To eliminate subject’s concerns for answering questions, the results of the survey were only used for academic research. Besides, in order to get better quality of the answers, some of the questionnaires were sent directly to the subjects by the researcher and the survey received cooperation and support from the employees of private colleges. Overall, the distribution, collection and qualify of questionnaire were all ideal.

### Research results and discussion

This paper uses exploratory factor analysis was carried out on the valid data collected. Firstly, the

principal component analysis method is used to extract the factors. According to the common value and factor loading of the 31 items, the items with low cross-loading, common value and factor loading are deleted. Secondly, gravel maps and eigen values are used to determine the principal component factors. At last, after item analysis, a stable factor structure of 26 items is obtained.

The results of data analysis show that the content structure of organizational responsiveness of private colleges has four dimensions, with KMO correlation coefficient as high as 0.959, spherical test chi-square value of 11046.321, and the interpretation rate of total variance of 58.724%. Detailed research data are shown in Table 1 below.

**Table 1** Factor analysis results of the content structure of organizational responsiveness of private colleges and the common value of each item

Items		Factor loading				Common value
		F1	F2	F3	F4	
Item 1	Private colleges run very smoothly.	0.683				0.672
Item 2	All their functional organizations have common goals and plans.	0.593				0.697
Item 3	The education provided by them can adapt to market changes.	0.584				0.685
Item 4	Their tasks can be finished on due time.	0.567				0.657
Item 5	Changes in teaching standard can be quickly communicated to their first line teaching units.	0.71				0.714
Item 6	All their functional organizations can follow the direction of the school to work efficiently.	0.583				0.726
Item 7	They can track the implementation of plans and correct it in time.	0.745				0.726
Item 8	Their functional organizations can cooperate efficiently.	0.732				0.674
Item 9	Their strategic plans can be funded well.	0.596				0.634
Item 10	Their risk early-warning plans are comprehensive		0.733			0.670
Item 11	They can recognize both opportunities and possible challenges from the surrounding information.		0.743			0.603
Item 12	They have sharp judgment and insight into job market.		0.698			0.637
Item 13	They often communicate with local government and enterprises.		0.593			0.678

Item 14	They attach importance to the educational mechanism of combining learning and production.		0.581			0.638
Item 15	They have functional organizations to collect information from internal and external sources.		0.612			0.610
Item 16	They often engage staff and faculty in important decision-making.			0.649		0.650
Item 17	They attach importance to building internal information sharing and communication mechanism.			0.688		0.721
Item 18	They can make impotent decisions within short time.			0.633		0.701
Item 19	They can deal with conflicts during decision-making process.			0.609		0.712
Item 20	They have specific organizations to adjust their goals and plans.			0.623		0.733
Item 21	They discuss causes of failures with different management levels.			0.497		0.648
Item 22	Compared with other counterparts, they have closer cooperation with local enterprises and government institutions.				0.695	0.611
Item 23	Compared with other counterparts, they have closer cooperation with scientific research institutions and educational associations				0.703	0.664
Item 24	Compared with other counterparts, they have closer cooperation with educational authorities.				0.687	0.612
Item 25	They have good cooperation experiences with partners.				0.524	0.718
Item 26	They acquire experiences and lessons from other counterparts.				0.574	0.586
Variance contribution ratio		19.863	16.237	12.547	11.934	
Overall variance contribution ratio		58.724				

According to Table 1, the model for content structure of organizational responsiveness of private colleges should include four factors. Combining the literature research and the interviews, this study name the four factors as follows:

Factor one: Responsive implementation refers to the implementation of responsive measures by an organization. Specifically, it includes whether strategic plans of a private college can be implemented, whether the follow-up implementation of strategic plans is paid attention to, whether its required tasks can be fulfilled within the due time, whether its overall operation is smooth, whether its education can quickly adapt to social changes, whether the changes in teaching standard can be quickly communicated to its first-line teaching units, whether there is common goal plans among its organizations, whether its organizations can work efficiently in response to the goal plans and whether its organizations can cooperate efficiently.

Factor 2: Recognition and early-warning refers to an organization's perception of changes in its internal operation. Specifically, it includes whether a private college have specialized agencies to collect internal and external information, whether it has risk pre-warning plans, whether it attaches importance to the educational

mechanism of combining learning and production, whether it has sharp judgment and insight into job market, whether it can recognize challenges and opportunities from surrounding information and how it interacts with its partners.

Factor 3: Flexible decision-making refers to the process in which an organization formulates its responsive measures. Specifically, it includes whether a private college can make important decisions quickly, whether it can deal with conflicts in decision-making quickly, whether it has specialized agencies to revise and improve its goal plans, whether it often assembles different managerial levels to discuss the cause of decision-making failures, whether it attaches importance to the internal information sharing and communication mechanism within the school, and whether it engages staff and faculty in important school decision-making.

Factor 4: Social relations refer to the social connections of an organization. Specifically, it includes whether a private college has good cooperation experience with its partners, whether it has closer relations with educational authorities, educational associations, scientific research institutions, government institutions and local enterprises than other counterparts and whether it can gain experience from the management and development of other counterparts.

In summary, it can be found that the four-factor model of organizational content structure of private colleges represent different dimensions. To see whether these dimensions can truly reflect the organizational content structure of private colleges or not, this paper uses correlation analysis to test the four factors. According to correlation analysis results, there is a moderate correlation among the four factors. That is to say, the four factors of responsive implementation, recognition and early warning, flexible decision-making and social relations can form an organic whole and can reflect the organizational content structure of private colleges. The specific results are shown in Table 2.

**Table 2** Correlation coefficient matrix of the four factors in the content structure of organizational responsiveness of private colleges

	Mean	SD	Responsive implementation	Recognition and early warning	Flexible decision-making
Responsive Implementation	4.256	752			
Recognition and early warning	4.145	816	627**		
Flexible decision-making	4.369	847	758**	649**	
Social relations	4.347	836	716**	685**	674**
Note: **means $p < 0.01$					



## Reliability and validity test of the questionnaire for content structure of organizational responsiveness of private colleges

Reliability and validity are important indicators to evaluate quality of a scale. To evaluate whether the model of content structure of organizational responsiveness of private colleges has the functions of evaluation, judgment and prediction, this paper must carry out reliability and validity test to evaluate whether the measurement tool is good or not. After exploratory factor analysis and confirmatory factor analysis on the content structure, the reliability and validity test is carried out. In order to achieve that, to test the reliability and validity of questionnaire is the main purpose of the research.

Subjects: There are 1021 data used for analysis. Questionnaire survey is used to carry out exploratory and confirmatory factor analysis.

Statistical analysis methods: the methods include exploratory factor analysis, correlation analysis, reliability analysis and confirmatory factor analysis.

### 1. Validity analysis

In statistics, validity refers to the correctness of a test, mainly including surface validity, content validity, criterion-related validity, construct validity and so on. Generally speaking, the more validity criteria can be measured, the higher the validity of the test is.

Surface validity is not a true validity indicator. It refers to the situation in which the examinees, who are not trained but only bystanders, determine the applicability of a test only by common sense judgment or assumptions.

Content validity is a quantitative indicator of the degree to which the test content reflects test subject. It mainly reflects the appropriateness of scope and content of test items and is assessed by expert evaluation. After conducting in-depth interviews with professionals and reviewing the scope and content of the questionnaire items, this study revises and improves the questionnaire repeatedly to ensure its content validity.

Construct validity refers to the degree to which a test measures what it claims, or purports. The results of exploratory factor analysis and confirmatory factor analysis of the content structure of organizational responsiveness are quantitative indicators of the construct validity of this study. On one hand, the analysis results show that the four factors in the model are clearly structured, all indicators meet the requirements, and there is high consistency between the confirmatory factor analysis results and the theoretical assumptions of the study. In addition, the correlation between items in a factor and the total score of the factor is also a way to evaluate the construct validity of a questionnaire. If there is a significant correlation between items of a factor and the total score of the factor, it shows that the factor has good homogeneity, which indicates that the questionnaire has a good construct validity. In the study, the correlation between the items of a factor and the total score of the factor is 0.711-0.831, which is shown in Table 3. It can be seen that all the data show significant correlation. Therefore, it can be concluded that there is good homogeneity in each factor, which indicates that the questionnaire used in the study has good construct validity.

**Table 3** The correlation between the items and their corresponding factor in the questionnaire for organizational responsiveness

Items	Item1	Item2	Item3	Item4	Item5	Item6	Item7	Item8	Item9
F1	0.745**	0.768**	0.757**	0.765**	0.759**	0.768**	0.762**	0.756**	0.733**
F2	0.767**	0.843**	0.765**	0.763**	0.735**	0.764**			
F3	0.767**	0.825**	0.789**	0.773**	0.791**	0.722**			
F4	0.734**	0.822**	0.834**	0.786**	0.762**				

note: \*\*means  $p < 0.01$

**Table 4** The mean value, standard deviation and correlation coefficient matrices of the factors in organizational responsiveness

	Mean	SD	Responsive implementation	Recognition and early-warning	Flexible decision-making	Social relations
Responsive implementation	3.212	0.664				
Recognition and early-warning	3.268	0.764	0.542**			
Flexible decision-making	3.274	0.755	0.678**	0.515**		
Social relations	3.252	0.745	0.622**	0.684**	0.712**	
Non-financial performance	3.271	0.757	0.527**	0.603**	0.576**	0.788**

Note: \*\*means  $p < 0.01$

Criterion-related validity is the correlation between test scores and external criterion. The higher the correlation is, the higher the criterion-related validity is. Therefore, an independent external criterion means the test score is equal to criterion-related validity. The correlation coefficient matrix of all factors in content structure of organizational responsiveness of private colleges and the outcome variables of financial performance and non-financial one etc. is shown in Table 4. According to that, the test shows a significant positive correlation, which suggests good criterion-related validity,

## 2. Reliability test

Reliability refers to the consistency, stability and reliability of test results. Generally, internal consistency is the main criterion to the reliability of a test and internal consistency is usually measured with Cronbach's alpha. Usually, when Cronbach's alpha is below 0.35, it indicates the scale has poor reliability. When Cronbach's alpha is between 0.35 and 0.65, it indicates that the scale needs to be revised; when Cronbach's alpha is between 0.65 and 0.70, the scale has acceptable reliability; when Cronbach's alpha is between 0.70 and 0.80, it indicates that the reliability is good; when Cronbach's alpha is between 0.80 and 0.90, it suggests the reliability is excellent. Therefore, whether the survey data is acceptable depends on whether the reliability coefficient of each factor in the questionnaire is greater than 0.70. In this study, the internal consistency coefficient of each factor and the questionnaire is greater than 0.840, and the overall internal consistency coefficient is 0.966, which shows that the

questionnaire meets the measurement requirements, and has good reliability (the detailed data are shown in Table 5).

**Table 5** Internal consistency coefficients of the factors and the questionnaire

Factors	F1	F2	F3	F4	The questionnaire
Cronbach a	0.925	0.871	0.876	0.840	0.966

## Results and discussion

In this study, the first step is to use exploratory factor analysis to analyze the questionnaire data and the analysis results show that the four-factor content structure is clear. The second step is to compare the advantages and disadvantages of competing models and carry out confirmatory factor analysis. Through the analysis, the model for the content structure of organizational responsiveness of private colleges is determined. Reliability and validity test is the third step and the test results show that the results of this study have good reliability and validity, and are consistent with the actual situation of private colleges. Besides, the test results also show that the model for content structure of organizational responsiveness of private consists of the four factors: recognition and early warning, responsive implementation, social relations, and flexible decision-making.

### 1. Discussion on the factors in content structure of organizational responsiveness of private colleges

Responsive implementation consists of 9 items, which includes cooperation among functional organizations, rapid development and implementation of task plans, smooth operation of non-profit organizations as a whole, tracking of follow-up implementation of task plans, financial support for implementation of strategic plans, and educational adaptability of school organizations. With its contribution rate of 19.863%, responsive implementation is the first factor in the content structure of NPO's organizational responsiveness. To be clear, organizations in a school should have clear tasks and explicit requirements. When carrying out their tasks and implementing the strategies, all organizations in the school should cooperate sincerely and support each other to maximize benefits and ensure the effective implementation and completion of the school's strategic initiatives.

Recognition and early warning consists of six major items, which includes risk early-warning, interactive and cooperative accumulation and analysis of surrounding information, recognition of threats and opportunities in changes, evaluation of the market and so on. With its contribution rate of 16.237%, recognition and early warning is the second factor in the content structure of organizational responsiveness of non-profit organizations. Therefore, sensitivity and timely responsiveness to changing information is essential for non-profit organizations to respond to changes. Only when organizations in a school have strong ability of risk prevention, early warning and responsiveness, can they make accurate, timely and effective response in face of big changes and avoid serious consequences.

Flexible decision-making consists of six major items, which are related to the management mechanism

and the culture of school organizations. It specifically includes encouraging faculty and staff to actively participate in major decision-making, the process of making strategies efficiently through school mechanism and resource, seeking support from faculty and staff in implementation of strategies, etc. With its contribution rate of 12.547%, flexible decision-making is the third factor in content structure of NPO's organizational responsiveness. Therefore, in order to win staff and faculty's understanding and support for school's strategic decision-making, it is necessary for a school to establish an effective internal information communication and sharing mechanism so as to enhance the flexibility of decision-making, and to promote the effective implementation of decisions. At the same time, flexible decision-making would help a school seize opportunities to cope with changes and take immediate measures to avoid or reduce losses. In addition, in order to ensure correct and effective measures, a school should also follow up the implementation of strategies, deal with conflicts and contradictions on time, and ensure that decision-making is efficient and smooth.

Social relations includes five major items: obtaining useful ideas and experience from external experts, having cooperation with government departments, enterprises and scientific research institutions, education authorities and related parties etc. With its contribution rate of 11.934%, social relation is the fourth factor in content structure of NPO's organizational responsiveness. A school can't communicate and cooperate with outside world without social relations. In a school's decision-making, responsive implementation, information collection and other activities, rich social relations provide human resource, materials and technologies for the school to effectively reduce its risks in coping with changes. Therefore, in research on private colleges and universities in China, social relations are extremely important.

## 2. The comparison of this study and previous ones

Compared with James &Faizul's five-factor model (2007), Magali& Michael's three-factor model (2006), Timothy's two-factor model (2005) and Claus's three-factor model (2003), the four-factor model of content structure of organizational responsiveness of private colleges in this study has the following differences:

The five-factor structural model of James &Faizul (2007) is based on the organizational responsiveness of production lines, or more strictly speaking, on the organizational responsiveness of supply chain management, so the model is applicable to organizational responsiveness of enterprises. However, it can't be considered that the content structure of organizational responsiveness of an enterprise is a five-factor model consisting of strategic planning, flexible manufacturing, employees with multiple skills, supply chain structure and environmental scan. As far as the the two-factor structural model of Timothy (2005), its factors are applicable to the organizational responsiveness of for-profit organizations, but specifically that of the human resources management, and its empirical research are not comprehensive enough. In summary, it can be found that there is still no in-depth research on the organizational responsiveness of private colleges and the existing research hasn't achieved concrete results. As for the content structure of the organizational responsiveness of private colleges, there is no generally accepted effective evaluation and interpretation method.

Based on the existing research, this study conducts an empirical research on private education in China. Through confirmatory factor analysis and exploratory factor analysis, it is concluded that the content structure of organizational responsiveness of private colleges consists of four factors: recognition and early warning, flexible decision-making, social relations and responsive implementation. The content structure of this research results is different from that of previous ones, which mainly lies in the number of factors and the composition of factors in content structure. Compared with James &Faizul's (2007), this research has same definition of the factors of flexible decision-making and recognition and early warning but different items in these factors. James &Faizul's (2007) focuses on the two factors of production strategies and flexibility in recognizing external environment changes, which includes 7 and 4 items respectively. However, this study has 6 items in each factor and pays attention to both external and internal information recognition. In terms of decision-making, this study emphasizes the importance of responsive implementation, and the flexibility of the overall operation strategy, while James &Faizul (2007) lacks research on these perspectives. It is worth mentioning that the breakthrough made by this study is the discussion of social relations, which is a factor consistent with the practice of private colleges in China. As a factor with Chinese characteristics, it is rarely mentioned by other scholars.

## Conclusion

Through in-depth interviews, preliminary study, open-ended questionnaires, literature review, and confirmatory factor analysis and exploratory factor analysis of the survey data, the study further finds that recognition and early warning, flexible decision-making, social relations and responsive implementation are the four factors of organizational responsiveness of private colleges. In addition, through reliability and validity test, the research results show that the questionnaire for the content structure of organizational responsiveness of private colleges has good reliability and validity.

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