

Research on the Competence of Secretaries of Primary-Level Party Branches in Colleges and Universities

-Based on the View That Competency Elements Are Interconnected

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Abstract

Based on the view that competency elements are related, this paper, taking the party branch of a specific school in C university as an example, initially defines the competency elements of secretaries of primary-level party branches in colleges and universities through methods of document analysis and semi-structured interview. Then Delphi method is used to test and correct the elements. Finally, the interrelation among elements and their hierarchical structure are done via Fuzzy Interpretive Structural Mode. Research shows that competency elements of secretaries of primary-level party branches in colleges and universities can be divided into three different types, including Driven, Dependent and Independent Type. The structure of competence consists of 17 elements and 3 levels. In the process of promoting competence, more importance should be attached to group management, educational training and supporting work.

Keywords

Colleges and Universities, Secretaries of Primary-Level Party Branches, Competence, Fuzzy Interpretive Structural Mode

1. Introduction

In the new era of Socialism with Chinese Characteristics, the construction and development of primary-level party branches in colleges and universities are currently facing a new situation, and higher requirements are needed for the construction of leaders in primary-level party branches. Primary-level party branches in colleges and universities not only perform a decisive role in higher education and shoulder the responsibility to educate, manage, supervise and serve teachers, students and party members, but implement policy on education and train qualified personnel. The construction and development of primary-level party branches in colleges and universities must keep pace with the times, give full play to their roles in the new era of higher education, and provide a strong organizational guarantee for promoting "Double Top" construction and training socialist builders and successors of national rejuvenation. Since secretary is the leader of primary-level party branch, his or her competence has a direct influence on work quality and effects. This paper tries to figure out the competency elements of secretaries in primary-level party branches and clarifies the principles and hierarchical structure of competency elements, providing an important reference for improvement of secretaries' training system and their competence. Therefore, this paper has great practical significance and value. On the basis of competency elements and Fuzzy Interpretive Structural Mode's influence on relation among elements and hierarchical structure, we further put forward the strategies for enhancing competence of secretaries of primary-level party branches who serves as the research object in the hope of giving reference for their development.

2. Literature Review

Since the beginning of 21st century, academics at home and abroad have conducted research on competence and competency model so as to yield fruitful results in relevant theories and practical studies, which mainly focused on the analysis of the competence characteristics of certain posts, the construction of competency model as well as the research of human resource management based on competence theory, such as personal assessment, selection, education and training. On the basis of the competency-based job analysis technique and the combination of semi-structural interview and open questionnaires, Wang and Chen (2002) studied the competence characteristics of middle and senior managers in enterprises. Moreover, they used the structural equation modeling to reveal the differences of competency structure in different posts. Zhao et al. (2006) proposed the way to construct administrators' competency model under the guidance of competence and competency model. They also put this model into practice by analyzing five aspects, including post analysis, personal selection, administrators' training, performance evaluation and career planning. Yang and Lu (2019) created evaluation model of innovative scientific and technological talents which included the value of circulating knowledge, explicit knowledge value and tacit knowledge value based on competency model and knowledge value. Wang et al. (2019) focused on the competence of leaders in state-owned enterprises in the era of big data, taking the power company as an example to build a leadership competency model containing 28 competency qualities.

In recent years, with continuous expansion and refinement on the research of competence and competency model, some academics began to study the competency characteristics of secretaries of primary-level party branches in colleges and universities as well as the construction of competency model. Li & Shen (2016) constructed the competency model of secretaries of student party branch in colleges and universities through behavioral event interview (BEI) and questionnaire and investigated their competence based on competency model. From the perspective of life-cycle theory, Ge (2019) divided the construction and development of teacher party branches in colleges and universities into three stages (establishment, growth and transformation period), illuminating the competence of secretaries of party branches in different stages from four aspects: political leadership, the ability to organize and execute, the ability to learn and innovate and cohesive personality. To sum up, there is relatively little research related to competence of secretaries of primary-level party in colleges and universities and less research on the constituent and structure of competency. However, the competence of secretaries of primary-level party branches in colleges and universities includes multiple dimensions, levels and elements, and the elements are interrelated. If we can define the competency elements and hierarchical structure and clarify the connection among the elements, we can deepen the insight into the competence of secretaries of party branches, making the improvement of their competence more systematic, targeted and effective. In view of this, this paper studies the competence of secretaries of primary-level party branches in colleges and universities in the new era based on the perspective of the correlation of competency elements and methodology of the structural modeling of systems engineering.

3. Structural Modeling Method

Warfield introduced the basic approach of Interpretive Structural Modeling (ISM) in 1973. This method is suitable for complex systems with multiple dimensions and interrelationships, which helps conduct quantitative research on the disorderly factors in the system structure according to their internal correlation and categorize their hierarchies in a scientific and reasonable way through personal experience and computer technology, so as to improve the overall understanding of the system (Banadkouki et al., 2018). Because of the fuzzy relationships among system factors, fuzzy matrix in fuzzy mathematics was introduced into ISM to improve the accuracy of relationships among factors, which transformed qualitative analysis into quantitative analysis and made the results more reasonable and accurate.

Meanwhile, Cross-Impact Matrix Multiplication Applied to Classification (MICMAC) is based on the principle of impact matrix multiplication to create a stable impact matrix for observing and recognizing the factors that have driving and dependence power. MICMAC is a supplement and extension of ISM. The reachability matrix in ISM is obtained by multiplying the impact adjacency ma-

trix. The driving power is the total number of elements, containing themselves, which it may benefit to achieve. The dependence power is the total number of elements, containing itself, which it may benefit to achieve. MICMAC is used to identify driving and dependence power, thus helping to find out the focus on management and intervention of competency elements (Agrawal, 2020).

As there remain a great deal of elements in the competence of secretaries of primary-level party branches in colleges and universities, these elements, internally, are influenced and promoted by one another. It is of great significance to grasp and improve the competence of secretaries of party branches and to clarify the interrelationships among elements, hierarchical structure and the types of elements. Wang et al. (2021) studied relevant competency research at home and abroad and conducted in-depth interviews and analysis of secretaries of primary-level party branches in colleges and universities by means of behavioral event interview, and finally obtained six competency dimensions, including political accomplishment, moral cultivation, knowledge accomplishment, research ability, the ability to investigate and study, and leadership ability. Shang and Yin (2020) collected data through questionnaire, conducted interview by means of behavioral event interview and proposed the competency model of secretaries of primary-level student party branch in college and universities, which contained 39 competency elements in five dimensions. Throughout the existing research, the secretary's competence of party branch has been discussed in terms of its structure, but rarely analyzed from the direct relationships among constituent elements. Taking C university as an example, this paper uses interpretive structural model to define the relationships among elements and the hierarchical structure, which is helpful to clarify the relationships among competency elements of secretaries of party branches, thus contributing to further management and intervention of competency elements.

4. The Construction of Competency Elements of Secretaries of Primary-Level Party Branches—Taking C University as an Example

4.1. The Extraction of Competency Elements

From the perspective of job responsibility and literature analysis, this paper refers to domestic literature related to competence of secretaries of primary-level party branches in colleges and universities and documents of their meritorious deeds, identifies and extracts the elements which had been discussed many times by scholars and experts, initially forming a set of competency elements, their names and dimensions (see **Figure 1**).

4.2. The Test and Correction of Competency Elements

4.2.1. Consulting Experts' Opinions

On the basis of Delphi method, 20 scholars and experts in the field of party study are surveyed in the form of questionnaire compiled by Likert Scale. The screening indices are mean value scored on the importance of competency elements,



Figure 1. The initial competency elements of secretaries of primary-level party branches.

variable coefficient and full mark rate. Then we extract the elements which satisfy three requirements, including their mean values lower than 4, variable coefficients higher than 20% and full mark rate lower than 40%. In the first round of opinion consultation, experts don't raise objections to the dimensions of elements. But the scores of "the ability to organize", "the ability to analyze and make a decision", "the ability to express", "academical ability" and "accomplishment-oriented style" don't meet the requirements, so these five competency elements are cut out. At the same time, experts suggest that political theory should be expressed as political accomplishment, and knowledge reserve and academical ability should be combined as knowledge accomplishment. After experts' opinions are accepted, questionnaires are prepared again for opinion consultation. In the second round, score of each element meets the three requirements and experts also propose new opinions (see **Table 1**).

4.2.2. Analyzing the Reliability of Experts' Opinions

The reliability of experts' opinions is mainly reflected by the degree of authority and concentration of opinions and their participation. In this opinion consultation,75% of the experts have more than 7 years of working experience as the primary-level leaders in colleges and universities, and 35% of the experts serve as secretaries of primary-level party branches in colleges and universities for more than 4 times, indicating that the experts involved in this opinion consultation have professional and rich experience. In addition, in the two rounds of opinion consultation, the recovery rate of valid questionnaire is above 90% and the competency elements meet the retention condition after one revision because of the active participation of experts and the high concentration of their opinions. Therefore, we establish a set of competency elements of primary-level of secretaries of party branches in C university (see **Table 2**).

Competency elements	Mean value	Standard deviation	Variable coefficient	Full mark rate	Competency elements	Mean value	Standard deviation	Variable coefficient	Full mark rate
A1. The ability to handle party affairs	4.70	0.470162	10.00%	70.00%	C1. Strong conviction	5.00	0.000000	0.00%	100.00%
A2. The ability to execute	4.60	0.502625	10.93%	60.00%	C2. Model consciousness	4.55	0.604805	13.29%	60.00%
A3. The ability to learn	4.35	0.587143	13.50%	40.00%	C3. Responsibility consciousness	4.70	0.470162	10.00%	70.00%
A4. The ability to build a team	4.45	0.604805	13.59%	50.00%	C4. Service consciousness	4.55	0.604805	13.29%	60.00%
A5. The ability to organize	3.90	0.967906	24.82%	30.00%	C5. Consciousness of change and innovation	4.40	0.598243	13.60%	45.00%
A6. The ability to communicate and coordinate	4.30	0.656947	15.28%	40.00%	C6. Mass base	4.45	0.686333	15.42%	55.00%
A7. The ability to analyze and make a decision	3.80	0.894427	23.54%	25.00%					
A8. The ability to express	3.75	0.850696	22.69%	20.00%	D1. Honesty and self-discipline	4.80	0.410391	8.55%	80.00%
					D2. Fairness and integrity	4.85	0.366348	7.55%	85.00%
B1. Political theory	4.75	0.550120	11.58%	80.00%	D3. Dedication	4.65	0.489360	10.52%	65.00%
B2. Knowledge reserve	4.35	0.670820	15.42%	45.00%	D4. Accomplishment- oriented style	3.80	1.005249	26.45%	30.00%
B3. Academic ability	3.85	0.875094	22.73%	25.00%	D5. Democratic conduct	4.50	0.688247	15.29%	60.00%

Table 1. The result of opinion consultation in the first round.

4.2.3. Identifying the Fuzzy Correlation of Elements and Establishing the Reachability Matrix

By analyzing questionnaire given to members and staffs of primary-level party branches, we have a fuzzy judgement of correlation of competency elements. According to the valid 39 questionnaire, we get the fuzzy adjacency matrix A by using mean value method to deal with the results and identify the direct impact among competency elements (see Figure 2).

According to the correlation among competency elements, we select maximum and minimum fuzzy operators as degree of membership function, and fuzzy reachability matrix *R* is calculated by MATLAB, reflecting the indirect relation among the elements. Secondly, we classify the level of intensity based on the threshold of fuzzy reachability matrix *R*. The bigger threshold, the more subdivision of impact relation among elements. Similarly, the smaller, the less subdivision. Therefore, in order to clearly reflect the impact relation and hierarchical

Dimension	Competency elements	Connotation	Dimension	Competency elements	Connotation			
	1) The ability to handle party affairs	Being familiar with the development, training and management of party members, collection of party fees, encouragement, care, assistance and other primary-level party affairs		8) Strong conviction	With strong conviction of socialism with Chinese characteristic, being deeply conscious of the need to maintain political integrity, thinking in big-picture terms, following the leadership core, keeping in alignment with the central Party leadership, staying confident in the path, theory, system, and culture of socialism with Chinese characteristics, upholding the core position of the General Secretary on the Party Central Committee and in the Party as a whole, upholding the Central Committee's authority and its centralized, unified leadership			
Ability	2) The ability to execute	Resolutely implementing the work arrangements and instructions of the superior Party organization and leading members of party branch to efficiently complete various tasks	Personal characteristics	9) Model consciousness	Serving as a model and setting an example for other party members			
	3) The ability to learn	Keeping pace with the times, actively learning all kinds of skills and knowledge to guide practice and promote work		10) Responsibility consciousness	Having a strong sense of responsibility for work and daring to shoulder responsibility			
	4) The ability to build a team	Steadily providing daily learning and education and an institutional guarantee, formulating standard for branch construction and strengthening the building of branch teams and party members		11) Service consciousness	Being helpful to members of party branches and the masse, actively promoting the construction of primary-level service-oriented party organizations, making party branches serve party members, party members serve the masses			

Table 2. A set of competency elements of primary-level of secretaries of party branches in C university.

Continued

	5) The ability to communicate and coordinate	Coordinating all factors, handling the relationship inside and outside party branch and promoting the branch work		12) Consciousness of change and innovation	Promoting innovation in practice, never having the negative attitude of "better do nothing so long as nothing bad happens" and opening up new working situation
				13) Mass base	Having close relation with the masses, getting well along with members of party branches and having great impact among teachers and students
				14) Honesty and self-discipline	Being strict with oneself and being honest
Accomplishment	6) Political accomplishment	Being armed with political theory and the thought on socialism with Chinese characteristics for a new era to guide practice and promote work, being deeply conscious of the need to maintain political integrity, thinking in big-picture terms, following the leadership core, keeping in alignment with the central Party leadership, staying confident in the path, theory, system, and culture of socialism with Chinese characteristics, upholding the core position of the General Secretary on the Party Central Committee and in the Party as a whole, upholding the Central Committee's authority and its centralized, unified leadership and closely following the Party Central Committee with comrade Xi Jinping at its core in thinking, stance and action.	Work style	15) Fairness and integrity	Adhering to fairness and justice and daring to criticize and self-criticism

16) Dedication Devoting to work, regardless of personnel losses and gains

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				0.67	0.67	0	0.67	0.53	0	0	0	0	0	0	0	0.67	0.3	1	0.3	0.27
				0.6	0.6	0	0.6	0.53	0	0	0	0	0	0	0	0.7	0.23	0.23	1	0.27
				(0.63	0.63	0	0.63	0.53	U	U	0	0	0	0	0	0.7	0.23	0.23	0.27	1

Figure 2. Fuzzy adjacency matrix *A* and fuzzy reachability matrix *R*.

structure among elements, the selected threshold value is 0.4. Then the reachability matrix R' within this threshold value is worked out by experiments with the help of fuzzy reachability matrix (see Figure 3).

4.2.4. Dividing the Hierarchy of Competency Elements and Extracting the Matrix *S*

We divide the hierarchy of competency elements based on reachability matrix R. According to the reachable set and antecedent set, we find the elements in the same range, among which the surface elements are $L1 = \{1, 2, 4, 5, 13\}$, the middle elements $L2 = \{14, 15, 16, 17\}$ and the bottom elements $L3 = \{6, 7, 8, 9, 10, 11, 12\}$. Among them, L1 and L2 belong to strongly connected components, indicating that these competency elements have a strong correlation and can influence each other. Meanwhile, the matrix *S* can be extracted by simplifying the reachability matrix *R*, namely reducing the complicate relationships among elements and retaining the important ones (Wang, 2015).

4.2.5. Constructing Multi-Level Hierarchical Structure Model and Conducting Cluster Analysis of Competency Elements

According to hierarchical structure and the matrix S, the competency model for secretaries of primary-level party branches in colleges and universities is drawn (see **Figure 4**). In addition, we also obtained the cluster analysis of competency elements based on the reachability matrix R (see **Figure 5**).

	(1)	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	
	1	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	1	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	
R'-	1	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	1	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	
	1	1	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0	
	1	1	0	1	1	0	0	0	0	0	0	0	1	0	1	0	0	
	1	1	0	1	1	0	0	0	0	0	0	0	1	0	0	1	0	
	$\left(1\right)$	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0	1 /	
	`																/	
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Figure 3. Reachability matrix *R* and the matrix *S*.



Figure 4. The competency mode for secretaries of primary-level party branches in colleges and universities.



Figure 5. The cluster analysis of competency elements.

5. Conclusion and Implication

5.1. Conclusion

This three-level competency mode for secretaries of primary-level party branches in colleges and universities consists of 17 competency elements. Among them, the basic competence at the surface is made up of 5 competency elements mainly belonging to the dimension of ability, which has a direct influence on the competence of secretaries of party branches. The important competence in the mid-

dle includes 4 competency elements belonging to the dimension of work style, which has a profound impact on them. The core competence at the bottom includes comprehensive competency elements, covering the dimensions of ability, accomplishment and personal characteristics, which has a deep and ultimate impact on them.

From the analysis of classification of competency elements, they can be divided into three different types, including dependent, independent and driven types. Dependent competency elements include the ability to handle party affairs, the ability to execute, the ability to build a team, the ability to communicate and coordinate, mass base, which show lower driving power and higher dependence and are easily affected by other factors. Therefore, the dependency elements can be improved indirectly by them. Independent competency elements are made up of honesty and self-discipline, fairness and integrity, dedication and democratic conduct, which show a moderate driving power and dependence and can be influenced by driven competency elements, as well as exerting an impact on dependent competency elements. Driven competency elements consist of the ability to learn, political accomplishment, knowledge accomplishment, strong conviction, model consciousness, responsibility consciousness, service consciousness and the consciousness of change and innovation, which show a higher driving power and exert a direct and indirect impact on other factors. Consequently, driven competency elements are the key to promote the overall competence of secretaries of party branches.

5.2. Implication

It is a systematic work to promote the competence of secretaries of primary-level party branches in colleges and universities in the new era, thus the following three promotion strategies can be adopted after the analysis of competency elements, the relationships among elements, hierarchical structures and types of elements.

We should, first of all, build a professional team management system. The management of secretaries of primary-level party branches in colleges and universities should be implemented throughout the whole process, from development, maturity to retirement, then standardizing the process of selection, training and assessment and constructing a dynamic life-cycle management system with secretaries' competency model as the core. To be specific, the criteria quantified according to the competency model should be applied to the selection of secretaries of party branches. In addition, based on the actual demand of different party branches, a differentiated evaluation system for competence can be formed and an appropriate evaluation method selected. In the process of development of their competence, a comprehensive training system can be established and a classified training scheme designed according to their competence development stage. With reference to the competency model in secretaries' evaluation process, we can design the path for their promotion and periodic plan for evaluation, with which we can make a dynamic adjustment to the competence goal. Moreover, in daily management, we can refer to the competency elements of secretaries of party branches, dig out potential backup talents such as core teachers and subject leaders, for whom we can conduct targeted management and training, optimizing the talent structure and forming the talent pool of secretaries of party branches.

Besides, we should construct a comprehensive training system. The secretaries' educational training is an important part to enhance their competence. And it is necessary to optimize the design of educational training system based on the competency model. Firstly, content and method of training should be improved. On the one hand, we can formulate the training content according to various competency elements and modular curriculum that matches contents and elements. On the other hand, training methods can be enriched with online and offline thematic training and interactive seminars to complement the training content. Secondly, in view of the differences and hierarchy of competence, a hierarchical training system can be designed to match the secretaries' competence with corresponding courses. Secretaries of party branches who lack specific competence can be complemented through different training courses, making individualized development a reality. Finally, as the improvement of secretaries' competence is a dynamic and gradual process, the design and implementation of training system cannot be accomplished overnight, so the system needs to be dynamically adjusted according to the actual situation and implemented steadily in a planned and phased manner.

Finally, we should construct institutionalized supporting system. To ensure the smooth development of the team management and training work and the improvement of secretaries' competence, it is necessary to improve supporting measures and form a systematic supporting system. By strengthening the organization and leadership, the Party Committee of the College can establish a special working group to carry out preliminary work, then gradually form a special functional department to promote the construction of macro programmatic system and specific normative system and improve personnel and logistics measures, so as to promote the normalized work of improving the secretaries' competence.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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