

# What Kind of Competency Should Chinese Provincial College Middle-Level Manager Have?

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## Abstract

Behavioral Event-interview was adopted to interview 30 college middle-level managers, half of which are the college institution middle-level managers and the others are the academy college middle-level managers. All interviews were transcribed into text content and encoded according to *Dictionary of Competence Encoding*. College middle-level managers' competency model was constructed on the basis of quantitative analysis of the interview data. The conclusions are: (1) the competency characters are: achievement motivation, service-oriented, team leadership, self-confidence, organization commitment, decision making, ability to analyze information and adhering to principles. (2) College institution middle-level managers and academy college middle-level managers have significant differences in the five characters.

**Key words:** competency, college middle-level managers, behavior event-interview

## 1. Introduction

Competency characters refer to the individual's potential and deep-level characters which can be distinguished between the superior performers and the ordinary performers at a work (or organization,

culture). It can be a motive, personal quality, self-image, attitudes or values, knowledge and cognition of a certain field or behavioral skills – any individual character that can be reliably measured or counted, and can be significantly distinguished between the superior performers and the ordinary performers. Spencer(1993)<sup>[1]</sup> Competency Model refers to the sum of competency characters that are needed in a particular task. It reflects all the important behavior, skills and knowledge that affects the individual success in a certain post and is often used as a workplace tool. It can help to recognize the needed job competence, the advantages and the realm to be improved and further study, professional growth and development, etc.

Research on competency can be dated back to Taylor's research on scientific management. The formal research started in 1973 with the publication of *Testing for Competence rather than for Intelligence* by the famous psychologist of Harvard University McClelland. In his paper he criticized the previous intelligence and aptitude test and pointed out that school performance, intelligence and aptitude tests could not predict profession or life achievements and competency test should replace them. He also put forward the six principles of effective competency testing. In 1982, McClelland and Boyatzis published the book *The competent manager:*

*A model for effective performance.* Since then, competency has been widely used in the corporation human resources management in the developed countries like USA, England, Canada and Japan, etc. At present, in corporation and organization management, theories and models about competency are more and more. they have gradually developed from the original assistant tool in training to development-oriented activities with definite goal.

The academic research on competency in China started in the late 1990s. Qian Shugang and Yan Gonggu (1999) reviewed and explained the basic features of managers from the perspective of work competency. With the administrators from telecommunication industry as their objects, Shi Kan and Wang Jicheng (1999, 2002) made an attempt to study competency characters assessment based on Spencer's 21-item competency model. Zhong Lifeng and Shi Kan (2002) conducted a behavioral event interview with 18 family business high-level managers and built Chinese family business high-level managers competency model. Wang Chongming (2002) studied and developed senior business proprietors selection and assessment system, which is used to select the superior managers with comprehensive competency. Lu You and Tu Yingsheng made a pilot study on the middle-level managers in the human resources department of the world's 500 top enterprises and built the corresponding competency model. Wang Dengfeng and Cui Hong (2006) studied the competency features of the Chinese grass-root party and government leaders. Xu Jianping and Zhang Houcan conducted a study on teachers competency model and assessment and constructed teachers competency model system. Hu Jianping and Wu Haodong implemented an empirical study on the college managers competency through deep interview and ques-

tionnaire and constructed the college managers competency model.

However, most of the studies focused on enterprises and other profitable organizations managers. Compared to the relatively mature study and application in corporations, application of competency-based management in Chinese institutions lags behind and is in the period of exploring and developing. Few studies were about college middle-level managers competency. Middle-level managers play a role in connecting the leadership and the underling at Chinese colleges and universities. Their whole quality directly affects the quality of education at colleges and universities. This study is to explore the College Middle-Level Managers Competency Model by using the classical competency model construct method—behavior and event-interview method, which is expected to enrich theoretical research on competency model in China and provide theoretical basis for the selection, assessment and training of college middle-level managers.

## **2. Method**

### **2.1. Participants**

Three middle-level managers were randomly selected as the pre-study objects. According to the performance criteria, 30 college middle-level managers were selected from three universities in Shandong province, half of which are high-performance group and the others are ordinary-performance group. In high-performance group, 8 are institution middle-level managers and 7 are academy middle-level managers while in ordinary-performance group, 7 are institution middle-level managers and 8 are academy middle-level managers

### **2.2. Sampling strategy**

15 high-performance college middle-level managers and 15 ordinary-performance

college middle-level managers are selected, half of which are college institution middle-level managers and college academy middle-level managers, respectively. Tri-angel assessment method was used to select 30 college middle-level managers from three universities in Shandong province. The ratio of college institution middle-level managers to college academy middle-level managers was appropriate. 10 high-performance participants and 10 ordinary-performance participants were selected as sample 1, the others as sample 2. Sample 2 is used to test the across-validity of the competency characters.

### 2.3. Method

Behavioral Event-Interview Method was adopted.

## 3 Results

### 3.1 analysis of interview length

Compare the interview length between the two different performance groups in sample 1, we found that the mean of the interview words was 6365.10 and the mean of interview time was 69.60 minutes in high-performance group while the mean of interview words was 5555.10 and the average interview time was 64.10 minutes in ordinary-performance group. Difference test was made between the interview length of the two groups, the significance  $\alpha$  is above 0.05, and there is no statistical significance. So the interview length will not affect the statistical competency difference.

The correlation analysis on the total frequency, the average scores, the highest rating score of the 20 texts with interview length showed that the use of the average rating score was comparatively stable. So in this study the average rating score was used as the criteria.

### 3.2. Reliable analysis on the competency assessment

According to *Dictionary of competence encoding*, the consistency of two appraisers encoding of the same text is the important factor affecting the reliability of competency characters assessment method and is the important index of the reliability and objectivity of the coding results. In this study, classification consistency coefficient, coding reliability coefficient and Person-related coefficient were used to probe the consistency of the two appraisers and to confirm the reliability of the competency characters assessment method.

Consistency and Reliability Coefficient of Coding. The consistency coefficient between the two appraisers' coding classification of the 20 interviewees is from 0.316 to 0.689, and the total consistency coefficient is 0.536. The coding reliability coefficient is from 0.480 to 0.816 and the total reliability coefficient is 0.698. Compared to the previous studies, the consistency coefficient and the coding reliability coefficient are reasonable.

Correlation Coefficient. Person correlation coefficient of the two appraisers' coding frequency, mean scores and the highest rate score of each interviewee was calculated and was used to further assess consistency between the two appraisers. Results showed the two appraisers correlated with each other significantly in coding frequency, the mean rating score and the highest rate score of 38 competency characters. Frequency, average rating and the highest rate score respectively had 5 competency characters items between which there was no significant correlation. This showed that the two appraisers' encodings were consistent.

### 3.3. Competency Difference Test

Average scores as the index, differences in every competency character between

the high-performance group and the ordinary-performance group were compared to test the significance. Table 1 shows the results.

Table 1 Competency characters test between the high-performance group and the ordinary-performance group

Competency characters	High-performance group		Ordinary-performance group		<i>t</i>	<i>df</i>	<i>P</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Achievement motivation (ACH)	2.5330	1.61892	0.9000	1.19722	2.565	18	0.019*
Consciousness of service-oriented (CSO)	2.3000	1.49443	1.0000	0.00000	2.751	18	0.013*
Team leading (TL)	1.7000	1.56702	0.2000	0.63246	2.807	18	0.012*
Self-confidence (SCF)	1.5500	1.70701	0.5000	1.08012	2.415	18	0.027*
Organization commitment (OC)	2.9880	1.22972	1.4500	1.60641	2.404	18	0.027*
Decision-making (DE)	3.6500	2.49499	1.3500	0.78351	2.781	18	0.012*
capability of information analysis (CIA)	1.5000	1.24722	0.6000	0.87560	2.400	18	0.027*
Principles insistence (PI)	2.1500	1.88635	0.4000	1.26491	2.437	18	0.025*

\* $p < 0.05$ ; \*\* $p < 0.01$

Table 1 shows that the high-performance group and ordinary-performance group have significant differences in eight competency characters. It accords with Spencer's principle of testing validity of competency characters: if the score of high-performer is higher than the ordinary one, the validity of the competency characters model can be confirmed. This study probed the college middle-level managers competency characters model by testing differences of the encoded average rating scores between the two groups. This model included 8 factors: achievement motivation, service-oriented, team leadership, self-confidence, organizational commitment, decision making, information analysis capabilities and adhering to principles.

### 3.4 Test of Competency Characters

Sample 2 was used to test the cross-validity of the competency characters and

to see whether the constructed competency characters model was suitable for sample 2 (analyst didn't know which was from high-performance group or ordinary-performance group).

First, Compare the interview length between the two different performance groups in sample 2 (5 from high-performance group, five from ordinary-performance group), we found they had no significant difference in interview words and interview time. This meant that interview length didn't affect the competency characters difference between the two groups. Then the 8 distinguishable competence characters got from sample 1 was tested in sample 2 and results show the two groups have significant differences in the 8 characters, that is to say, the scores of high-performance group is significantly higher than the ordinary-group, which proved that the selected characters were effective.

### 3.5 the Construction of College Middle-Level Managers Model

Consulting *Dictionary of Middle-Level Managers Competence Encoding* and the relevant studies on party and government leaders competency, college academy middle-level managers competency and college intellectuals competency, we designed college middle-level competency characters check-up form and interviewed 98 college middle-level managers in Shan Dong province and asked them to select 10 to 15 most important items from the

47 items and to rearrange order according to the frequency. We first identified the significantly different competency characters based on the t-test results of the interview data. Together with the frequency analysis results from competency characters check-up form, we confirmed the common competency characters of the high-performance group and ordinary-performance group and built the college middle-level managers competency model. Table two shows the specific competency characters.

Table 2 The Competency characters model of college middle-level managers

Competency characters			
High-performance group	Achievement motivation	Service-oriented	Group cooperation
	Self-confidence	Organization commitment	Decision-making
	Information analysis capability	Adhering principles	
Common competency characters	Interpersonal communication	Relationship building	Analytical thinking
	Expertise	Conceptual thinking	Forward-thinking
	Team leading	corporation	Resources
	understanding	Self-control	Innovation
	To deal with emergency cases	initiative	Develop

According to cluster analysis, we divided the competency characters college middle-level managers have into 6 categories. These are Personality, Cognitive characters, Coordination and flexibility, Incentive, Managing characters and Interpersonal impact.

### 3.6 Comparison of the Competency Characters Differences between the Two Groups

T-test of competency characters of college institution middle-level managers and college academy middle-level managers in sample 1 indicates they have significant differences in achievement motivation, interpersonal communication, lan-

guage expression, forward-thinking, as well as the characteristics of the financial management capacity. T-test of sample 2 shows the same results, which confirms the conclusion from sample 1.

## 4. Conclusion

Following the traditional competency model and using the behavior and event interview, the study built the college middle-level managers competency model. The main findings were listed as follows:

(1) High-performance group and ordinary-performance group of college middle-level managers have no significant differences in the interview length

and the total coding competency of frequency. The construction of the interviews is reasonable. There is a high positive correlation between the total coding frequency of competence and interview length; the high-performance group and the general performance group have significant differences in the total coding frequency of competence.

(2) Reliability and validity of coding. the consistency coefficient of the two appraisers' classification of the competence characters is 0.536; The total coding reliability coefficient is 0.698; Person-correlation of the competency frequency, the average rating scores and the highest rate score is significant; all reliability studies have shown that the competency characters assessment methods are reliable; Sample two were used to validate the across-validity, results showed the cross-validity is good.

(3) The Competency characters of college middle-level managers are as follows: achievement motivation, service-oriented, team leadership, self-confidence, organizational commitment, decision making, information analysis capabilities and adhering to principles.

(4) A competency difference test between college institutions middle-level managers and college academy middle-level managers have shown they have significant differences in five characters: achievement motivation, interpersonal communication, language expression, forward-thinking, as well as the characteristics of the financial management capacity.

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