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Developing Competency Model to Promote Tutor's Ability and Qualities in China

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Abstract

A competency model of tutoring in China is described and established. Emphasis is placed on the assessment of a tutor's sense of competence across different domains, instead of viewing perceived competence as a unitary construct. The results show that significant characteristics for an effective tutor include: personal charisma, emotional stability, ability to think clearly, patience, aptitude for training others and an affinity for the work. The validity of the empirical validity and copy reliability of the competency model are tested. Emphasis is placed on its factorial validity. Each subscale defines a separate factor. The factor structure is extremely stable. The scale is viewed as an alternative to those existing measures of questionable validity and reliability. Providing the detailed methods and details of most characteristics, the results will be significant for the training and development of tutors in China.

Keywords

Tutor, Teacher, Competency Model, Factor Analysis

1. Introduction

In recent years, the tutoring industry in China has gained rapid momentum. However, the effective development of the tutoring industry has been greatly restricted due to the inconsistency of tutors' abilities and quality. The overall quality of tutors plays a significant role in the survival and development of tutoring organizations. For students and their parents, tutors' abilities directly determine the quality of their education investment. Nowadays with China's rapid economic and social development, the value of competency-based human resource management has been drawing increasing attention, and competency characteristics model has been a hot research field of human resource management. Therefore, bringing competency-based human resource management models into the field of education, and establishing a tutor competency model have important theoretical

and practical significance. Thus in this paper, we will establish a competency-based tutor characteristics model and validate the model appropriately and effectively, so as to provide some reference to the recruitment, selection, training, and management of tutors.

A tutor in China is an instructor who gives private lessons in the education and training industry, which mainly involves after-class tutoring, IT training, foreign language training, online education, pre-school education and skill cultivating. More specifically, a tutor is a teacher who offers one-on-one private lessons through a chained or individual tutor center. One-on-one private tuition is becoming increasingly popular in China and throughout the world, with one in four children age 11 - 16 receiving it in China, according to recent research. More and more families support their children's learning at home and often employ a tutor to supplement their formal education, enhance test performance on general tests and on school entrance examinations. We know that for parents considering private one-on-one tuition, picking the right and competent personal tutor will be very important to them. By conducting this research, we aim to find a good competency model for tutors in China so that private one-on-one tuition can be very effective.

2. Concept and Theory Summarization

The concept of competency was first proposed by American scholar David C McClelland in 1973. McClelland (1973) believes that competency analysis shall be used instead of intelligence and aptitude tests and that those with excellent performance achieve outstanding results through their specific knowledge, skills and behavior. Richard Boyatzis (1982) says that the important thing is that specific behaviors lead to special results. One's personality or ability makes one exhibit the appropriate special behavior (Campion et al., 2011). Competency characteristics are a set of knowledge, motives, features, self-image, social roles and skills that lead to excellent or effective job performance (McClelland & Boyatzis, 1982). Competency model refers to a group of competencies required in a particular job.

There have been some relatively mature researches of competence characteristics of teachers in developed countries (Struyven & De Meyst, 2010). Teaching competencies refers to a group of characteristics including: educators' personality, teaching skills and knowledge of attitudes needed in various teaching backgrounds (Tigelaar, Dolmans, Wolfhagen, & Van der Vleuten, 2004). Researchers proposed that teacher competency model has four dimensions: planning, preparation, teaching environmental monitoring, teaching and professional responsibility (Carr, 1993; Pantić & Wubbels, 2010). Teacher competency characteristics is a multi-factor model structure, consisting of 15 factors: the ability to communicate, planning and organizing, work standards, adaptability, relationship building, friendship developing, continuous learning, technology or expertise tutoring, decision-making, learner-centered, quality concerns, information monitoring, innovation and action initiated, etc. (Heilbronn, Jones, Bubb, & Totterdell, 2002). It is generally believed among foreign scholars that teacher competency model should include: higher education (extensive science and cultural attainment), overall teaching qualifications (be able to teach, know the subject well and can also carry out research) and development capacity (comprehensive development including that of knowledge, ability, character and so on). However, there is still very little research in this field in China (Brühwiler & Blatchford, 2011).

3. Research Methods for Competency Model

To establish a tutor competency model, the research group conducted a survey among samples from tutors in Beijing to establish a competency model and implement the model validation procedure. A total of two questionnaires are involved in this survey, the "Tutor Characteristics Questionnaire" (hereinafter referred to as "Questionnaire") and "Tutor Questionnaire" (hereinafter referred to as "Questionnaire"). Competency Questionnaire is divided into two parts. With reference to previous studies, 42 questions associated with tutoring competency are selected. The first part of the questionnaire is intended to interpret and ask the respondents to evaluate the importance of each of the 42 tutoring competency traits. In order to prevent the ceiling effect, in the second part of the questionnaire, these 42 competencies are divided into seven dimensions: personality traits, professional identity, interpersonal communication, cognitive ability, teaching skills, management skills and influence. The respondents are required to sort the sub-item of each dimension and then the importance of the seven dimensions in sequence. There are two roles of the questionnaires. One is to select tutors with high performance, and the second is to investigate the competency of tutors with high performance. In the questionnaires, those surveyed are asked to write down their favorite teachers, and enumerate their favorite teachers'

competency characteristics.

This study is conducted in a survey. We do this survey in a chained tutoring company who was founded in 1993 and mainly engaged in English training and consulting on studying abroad. Now the company is primarily involved in language training, test counseling, one-to-one tutoring for elementary and middle school students, online education, education software, and reselling of other education technologies. There are a total of 385 chained tutoring centers and about 2500 one-to-one tutors employed by these companies in Beijing. The survey method used here consists of: (a) identification of the geographical area(s) of interest; (b) identification of the age group(s) of interest; (c) random selection of 56 sites from those geographical areas; (d) random selection of 5 tutors of the appropriate age (20 to 50) from within each of the 56 sites. 280 copies of Competency Questionnaire and Questionnaire were distributed and 263 valid questionnaires were recovered, with a total recovery rate of 94%. SPSS 16.0 software and EXCEL2007 data processing software are applied in the following data processing and analyzing.

4. Research Results

4.1. Competency Characteristics Ranking

Merging the two parts of the "Competency Questionnaire" and then sort them in order. The Specific method of data consolidation is as follows: take each characteristic data of the second part convert into seven grades. For example, in a certain questionnaire, the four entries' ranking of decision-making ability, adaptability, communication skills, teamwork in the management skills factor is 1, 3, 2 and 4. Then the converted grade will be 7, 3.5, 5.25 and 1.75. Sum these two parts of data. Results are shown in **Table 1**.

Table 1. Characteristics of "competency questionnaire" in an importance se

	Average	Standard Deviation		Average	Standard Deviation
Professional knowledge and skills	11.72	2.06	Forgiving Heart	9.85	2.21
Sense of responsibility	11.39	2.13	Patience	9.71	2.51
fairness and justice	11.29	2.33	Sense of efficiency	9.70	2.34
Care for students	11.15	2.22	Training others	9.70	2.18
Express skills	10.94	2.22	Decision-making ability	9.67	2.36
Familiarity with theory	10.93	2.27	Emotion stability	9.66	2.36
Honesty	10.92	2.34	Charisma	9.64	2.71
Communication and coordination	10.84	2.18	Interpersonal communication	9.62	2.40
Students motivation	10.83	1.64	Teamwork spirit	9.43	2.64
Confidence	10.77	2.58	Critical Thinking	9.31	2.27
Affinity	10.69	2.34	General thinking	9.24	4.86
Innovation capacity	10.51	2.35	Empathy	9.07	2.15
Handling of Counseling process	10.40	2.11	Information collection	8.99	1.97
Love of consulting career	10.33	2.923	Vitality	8.99	2.46
Clear thinking	10.22	2.16	Active listening	8.91	2.30
Self-awareness	10.13	2.54	Developmental feedback	8.72	2.24
Adaptability	10.07	2.09	Courage	8.70	2.51
Guiding students	10.06	2.00	Evaluative feedback	8.37	2.12
Analytic thinking	9.99	2.21	Attention to details	8.30	2.23
Work style	9.99	2.19	Sense of principle	8.19	2.35
Self-development	9.91	2.24	Sense of art	7.42	2.56

As is shown in the **Table 1** the average level distribution of characteristics is dense, which proved that these characteristics are more important to the tutors. In addition, the average level of some competency characteristics such as professional knowledge and skills, responsibility, fairness and justice, are relatively higher than the others. This shows that, compared with artistic sense, principle and some other characteristics, these are relatively more important to tutors.

4.2. Tutoring Teacher Competency Characteristics Frequency Statistics

In the "Questionnaire", the competencies of each favored tutor have been enumerated and the detailed statistics are in Table 2.

Ones with a higher frequency in Table 2 reflect more significant characteristics for tutors. Such characteristics, for example, are affinity, professional knowledge and skills, charisma, etc. On the other hand, it also shows that tutors with characteristics such as affinity, professional knowledge and skills, charisma, are more inclined to be favored. However, it does not indicate that tutors do not have characteristics such as honest and trustworthy, teamwork spirit. It may be due to that these characteristics are not so important as the others for the tutoring teachers.

4.3. Exploratory Factor Analysis

We deleted some items with lower reviews in **Table 1** and **Table 2** then performed a correlation analysis of deleted and undeleted items. The correlation coefficient is 0.77. This indicates that whether or not we delete these items, there is a high rate of consistency. The 8 deleted characteristics are decision-making ability, interpersonal, teamwork, broad thinking, empathy, courage, evaluative feedback, artistic sense. All recorded valid data and test results were obtained using the KMO and spherical Bartlett test. This is shown in **Table 3**.

Table 2. Competency characteristic percentage in "questionnaire".

	Percentage		Percentage
Affinity	8.01	Principle	1.75
Professional knowledge and skills	7.55	Self-development	1.70
Personal charm	6.11	Communication and coordination	1.51
Clear thinking	4.87	Sense of efficiency	1.49
Care for students	4.58	Information collection	1.45
Sense of responsibility	4.07	Attention to details	1.43
Familiarity with their Course	4.05	Interpersonal communication	1.43
Self-expression Skills	3.71	Artistic sense	1.33
Classroom control	3.19	Critical thinking	1.12
Work style	2.88	Fair and just	1.10
Emotional stability	2.86	Innovation capacity	1.10
Students motivation	2.734	Active listening	1.03
Guiding students	2.67	Developmental feedback	0.97
Vitality	2.56	Resilience	0.93
Loves the profession of teaching	2.52	Decision-making capacity	0.91
Courage	2.50	Self-awareness	0.86
Patience	2.44	Evaluative feedback	0.78
Analytic thinking	2.29	Empathy	0.68
Training others	1.91	Conceptual thinking	0.66
Forgiving heart	1.89	Teamwork	0.65
Confidence	1.81	Honesty and trustworthy	0.57

The statistics results showed that pre-test data is suitable for factor analysis (Ferguson & Cox, 1993). The data is analyzed with the principal component extraction method. After the maximum orthogonal rotation, in which we set the level of factor loadings above 0.4, we pinpointed seven factors with a high variance interpretation rate of 68.44%. The interpretability rate for the content of each characteristic is better. But there are not many entries with load factors, and some entries with double loads. We then deleted entries without loads and did a factor analysis. In order to compensate for errors we deleted 8 ambiguous entries and entries without a load, including guide students, critical thinking, dynamic, honest and trustworthy, counseling theory familiarity, attention to detail, fair, motivate students, etc. Finally a total of 26 items are left. The factor analysis feasibility test is used and the results are shown in **Table 4**.

Table 3. KMO & Bart1ett test results.				
KMO Sampling A	0.63			
	Chi-square value	3756.13		
Bartlett Spherical test	Degrees of freedom	861		

Level of significance

0.00

Table 4. Factor load and common factor variance.								
Competency Characteristic	Factor Load							
	F1	F2	F3	F4	F5	F6	F7	Communality
Sense of responsibility	0.67							0.53
Sense of principle	0.67							0.59
Work style	0.49							0.43
Forgiving heart		0.67						0.51
Patience		0.66						0.53
Active listening		0.52						0.47
Affinity			0.73					0.63
Care for students			0.67					0.61
Communication and coordination			0.49					0.47
Classroom control			0.42					0.39
Self-awareness				0.60				0.57
Loves the profession of teaching				0.60				0.73
Confidence				0.60				0.56
Self-development				0.42				0.40
Analytic thinking					0.623			0.58
Emotional stability					0.55			0.52
Clear thinking					0.54			0.49
Self-expression Skills					0.52			0.49
Professional knowledge and skills					0.50			0.47
Sense of Efficiency					0.46			0.42
Innovation capacity						0.63		0.62
Information Collection						0.52		0.47
Training others							0.55	0.48
Resilience							0.54	0.51
Personal charm							0.47	0.42
Developmental feedback							0.44	0.43

Finally, 29 competency characteristics were distributed in seven factors and are retained after the factor analysis. There are three characteristics in Factor 1, namely responsibility consciousness, including responsibility, principle and work style. There are three characteristics in Factor 2, including tolerance, patience and active listening. Factor 2 is titled "understanding others"; Factor 3, is titled "establishment and controlling of relationships". It includes four characteristics which are affinity, caring for students, communication and coordination, counseling process control; Factor 4 is titled "self- identification and professional identity" and consists of 4 characteristics: self-awareness, loving the consulting career, self-confidence and self-development. Factor 5 consists of 6 characteristics, namely analytic thinking, emotional stability, clear thinking, communication skills, professional knowledge and skills and a sense of efficiency. It is titled "professional competence". Factor 6 consists of 2 characteristics, namely innovative capacity, information collection characteristics, and is named the "creativity factor". Factor 7 is identified as "cultivating other's awareness", this included ability to train others, adaptability, personal charm and developmental feedback.

5. Research Results

Through the analysis, we can draw the tutor competency model and its specific distribution as shown in Table 5.

Table 5. Tutoring teacher competency model.

Tuble 5. Tutoring	teacher competency mod				
Factor	Competency Characteristics	Competency Characteristics Definitions			
	Sense of responsibility	Be able to realize the importance of his/her work in the organization, and able to work with sense of responsibility.			
Sense of Responsibility	Principle	Having the determination and courage to uphold the system, and implementing and executing the system effectively.			
	Work style	Having a upright work style, and words and actions in line with job requirements and reflect a high professionalism.			
	Forgiving heart	Be able to accept others' disadvantages and give them opportunities to correct their mistakes.			
Understanding of others	Patience	Be able to be patient when handling work and interpersonal problems; never get bored.			
otners	Active listening	Be able to focus on others' speech, get its points and have appropriate questions; Do not interrupt others' conversation frivolously.			
Relationship establishment & control	Affinity	Having a sense of humor, yet with dignified manner and a sense of intimacy when contacting with others.			
	Caring for students	Caring and understanding the students' needs and emotional experience, and trying to help them.			
	Communication and coordination	Handling various relationship properly and be able to obtaining the support and cooperation.			
	Handling of the counseling process	Having the process and atmosphere of counseling effectively.			
Self-identification and professional	Self-identification	Be able to identify and handle his/her own contradictions & disadvantages; have clear self-values.			
	Love of consulting career	Having a high sense of recognition for consulting career and willing to engage in consultants' career.			
identity	Confidence	Be confident in their ability to complete the work.			
	Self-development	Not satisfied with current situation and have a strong desire for further progress.			
	Analytic thinking	Breaking the problems to be solved into smaller portions and gradually explored until the problems are solved.			
	Emotional stability	Be able to handle all kinds of events with stable emotional state at work.			
Professional	Logical thinking	Having clear purpose, logical thinking.			
competency characteristics	Express skills	Be able to express their views clearly in an appropriate manner, so that others can understand their ideas.			
	Professional knowledge and skills	Having proficient knowledge of their professional field, and can extend the use & dissemination of relevant knowledge to others.			
	Sense of efficiency	Paying attention to work efficiency with quality guarantee.			

Continued

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Creativity	Innovation capabilities	Be able to demonstrate creativity in work and able to solve the work-related problems and propose a new concept with different ways of thinking.
	Information collection	Collecting information from widespread fields, paying attention to frontier information and be able to collect information and data by using a variety of methods.
Cultivating others' awareness	Training others	Paying close attention to the potential of students, help and train them.
	Adaptability	Be able to handle and respond to the unexpected events, in accordance with current situations.
	Personal charm and charisma	Be influential, and be able to attract others easily.
	Developmental feedback	Giving students specific & timely feedback at a high frequency, in order to promote their development.

6. Conclusion

The following competency characteristics are in general levels: patience, training others, guiding students, counseling process control, tolerance, analytic thinking, self-development, professional knowledge and skills, caring for students, counseling theory familiarity, love for career, sense of efficiency, skills, ability to motivate students and other characteristics. Using this data, a tutor competency model in China is established. Tutors can be assessed against this data to determine their effectiveness for the profession. By providing a valid tutor competency model and detailing characteristics of effective tutors, the results will have a significant impact for the training and development of tutors in China. In this paper, we have sampled survey of Beijing tutors, with "tutor competency questionnaire" and "tutor questionnaire". The validity of the empirical validity and copy reliability of the questionnaire are tested. It shows that tutors' significant characteristics include the personal charisma, emotional stability, clear thinking, affinity, style of work, patience and training others; Some competency characteristics that the tutors slightly lack such as communication, coordination and self-confidence; The following competency characteristics are in general levels: patience, training others, guiding students, counseling process control, tolerance, analytic thinking, self-development, professional knowledge and skills, caring students, counseling theory familiarity, love consulting career, sense of efficiency, skills, motivating students and other characteristics. A tutor competency model in China is established. Providing the detailed methods and details of most characteristics, the results will have certain significance for the training and development of tutoring teachers in China.

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