

*Full Length Research Paper*

# The identification of personnel director's competency profile through the use of the job competence assessment method

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**This research was based on the McClelland/McBer job competence assessment method. The major purpose of this study was to construct a competency model for superior personnel directors of Taichung County public elementary schools in Taiwan. This paper adopted questionnaires to identify competencies for 48 personnel directors in Taichung County in Taiwan. The researchers divided these samples into two groups. Study 1 included 14 superior personnel directors that received high-performance prizes from Taichung County Government over the period 2002 to 2007. Study 2 included 34 average personnel directors that never received any high-performance prizes. By using the procedures of job competence assessment method, the authors constructed and analyzed the competencies for these two groups. The academic and practical contributions and implications of the competency model were addressed. The researcher also found that the competency model of superior personnel directors in the study was similar to Spencer's generic competency model for helping and human service workers with the exception of self-control. At the same time, some suggestions for future research were offered.**

**Key words:** Job competence assessment method, competency model, personnel directors.

## INTRODUCTION

The most important role of public personnel directors was to provide public service such as selection, recruitment, development, training needs assessment and performance appraisal (Horton, 2000). For these purposes public personnel directors must be both effective and efficient. Thus, the performance of public personnel directors should be considered as an important part of public administration (Bilgin, 2007). According to Athey and Orth (1999), "The use of competency methods as a basis for human resource management has become wide-spread in the United States and is gaining a foothold in international human resource (HR) practice." Spencer pointed out that some reports even indicated that U.S. businesses had spent as much as \$100 million per year for several years to implement and develop job competency models. Cappelli (2003) criticized that

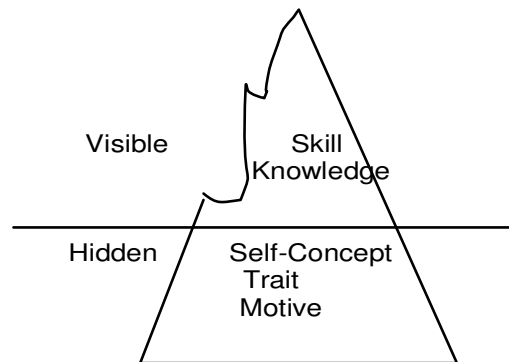
organizations were failed to develop HR competencies in recruitment and retention when they were downsizing and restructuring. While the governments in Taiwan did consider competency as an important task as U.S. businesses did, there were still some problems in public administration. But Boyatzis (2008) pointed out that despite widespread applications; there were few published studies of empirical link between competencies and performance. There were even few published researches showing that competencies should be developed.

Boyett and Currie (2001) suggested that there might be two reasons for the failure of competency-based management education in the public sector: First, in considering any potential relationship between public and private sectors, a key question was whether generic transfer of managerial ideas and practices from private to the public sector is appropriate. Second, it might be a question of the way in which the programmer was implemented and selected Taichung County personnel directors in public elementary schools to use as an example. The results were processed through the

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## The Iceberg Model



**Figure 1.** Central and surface competencies.

McClelland/McBer job competence assessment method and the principles designed by Spencer and Spencer. The study developed the competency model of superior personnel directors. The results were discussed and compared at the end of this article.

## LITERATURE REVIEW

### Concepts of the job competence assessment method

The concept of competency was first brought by Selznick who used the competency to describe the corporate advantages through different value activities (Selznick, 1957). But when mentioning the origin of competency, researchers generally cited McClelland's "Testing for Competency rather than for Intelligence" (McClelland, 1973). McClelland proposed the idea of "competency" which differed from the traditional job assessment method that was based on professional knowledge, personal experiences or IQ test. Using the McClelland/McBer job competence assessment method, one could locate competency factors for reaching high performance in high performance staffs and managers as the predictive factors for individual success (Spencer and Spencer, 1993).

McClelland's definition of competency had been the main driver of the competency movement. Since 1973, a number of competency studies had appeared in the management literature (Dubois, 1993; Draganidis and Mentzas, 2006; Li and Kan, 2008). Boyatzis (1982) defined a competency as "an underlying characteristic of a person which resulted in effective and/or superior performance in a job." According to Boyatzis, a competency in a job represented great ability and high performance. A person's competency reflected one's capability or what one could do. Yang et al. (2006) indicated that competency almost connoted identical meaning. The use of competency methods for human resource management

had become widespread in U.S. since Spencer and Spencer's "Competency at work: Models for superior performance" (Spencer and Spencer, 1993), which defined competency as "an underlying characteristic of an individual that was causally related to criterion-referenced effective and/or superior performance in a job or situation."

According to Spencer and Spencer, the most important characteristic of a competency was its ability to predict future job performance or behavior in a specific criterion or standard. They posed the Iceberg Model (Figure 1), which was made up of two parts: one was hidden (including motives, traits, self-concepts), and the other was visible (including knowledge and skills). They identified five types of competency characteristics consisting of motives, traits, self-concept, knowledge and skill. First, motives were the things which one thought about or wanted the stimulate action. Motives drove behavior toward certain goals and away from others. Second, traits were physical characteristics and consistent responses to situations. Third, self-concept was ones attitudes, values. Fourth, knowledge was information that one had in specific areas. Finally, skill was the ability to perform a certain task. Surface knowledge and skill competencies were relatively easy to develop and training was the most cost-effective way to secure those abilities (Spencer and Spencer, 1993). Any individual characteristics that could be measured or counted were in the visible part and could be delineated between superior and average performers or between efficient and inefficient performers. The hidden part were the most difficult to develop and they were ones existed personality. The researchers used the indicators of generic competency model to find out the hidden competencies and visible ones (Figure 1).

### Performance and competency

An organization's performance depended on its people and

their competencies. Administrative capacity was a major component of the performance (Daley et al., 2002; Bourgault et al., 2006). McClelland (1973) referred to competencies as components of performance associated with “clusters of life outcomes.” This definition of competency was widely thought of as any kind of psychological or behavioral attributes associated with successes. Based on the same concept, Athey and Orth (1999) defined competency as a set of observable performance dimensions, including individual knowledge, skills, attitudes, behaviors, and collective team, process and organizational capabilities.

Chung and Lo (2007) defined competency as the knowledge, skills and capacities which employees should have when finishing specific tasks or goals. Draganidis and Mentzas (2006) thought that a competency was a combination of tacit, explicit, behavior and skills which gave one the potential for effectiveness in task performance. As the concept of competency matured, thinking shifted to a more specific perspective of competencies as knowledge, skills, abilities, or other characteristics that differentiated superior performers from average performers (Mirable, 1997).

Although, competency could link to performance, they needed to be developed. The development of competencies could be eroded without continuous improvement and renewal (Boyatzis and Saatcioglu, 2008). Bird (1995) also referred to competencies which were more closely linked to performance than other entrepreneurial characteristics. For the purpose of this study and the idea of many other scholars, the article supposed that competency associated with high performance.

### **Advantages of competency**

A competency enabled one to effectively perform a given occupation to the standards expected in tasks (National Center for Education Statistics, 2002). As above a competency included both means (such as knowledge, skills, abilities) and an end (to effectively perform a given occupation or function to the standards expected in employment). Competency also could be acquired through training, learning and experience (Li and Kan, 2008). Competency-based programs were important for the learning organizations necessary in today's knowledge-based economy (Naquin and Holton, 2003). The reasons that businesses had broadly adopted the competency approach were included as follows (McClelland, 1973):

1. The best way to understand performance was to observe what people actually did to be successful, rather than to measure their intelligence.
2. The best way to measure and to predict performance was to have people perform key aspects of competency, rather than to demonstrate their attributes.

3. Competencies could be learned and developed over time.

4. Competencies should be made visible and accessible to people so they could understand and develop their performance.

5. Competencies should be linked to meaningful life outcomes, rather than to mental traits.

### **Performance management**

A worker's basis of performance was his individual behaviors. Individual behaviors were also influenced by motivation, ability, personalities. The individual behaviors should be tested in a set of standards of performance. Performance management could provide the linkage between the “what” (objectives, targets and performance standards) and the “how” (behaviors, competencies and processes) of personal performance (Beardwell and Holden, 2001). Performance management was “a strategic and integrated approach of increasing the effectiveness of organizations by improving the performance of the people who worked in them and by developing the capabilities of teams and individual contributors,” or “a continuous process involving reviews that focused on the future rather than the past...”(Armstrong and Baron, 1998).

Performance management was also the process of establishing an understanding of organizational goals. It guided personnel so as to enhance the contribution that they should make. To successfully complete the process, the organization should be based on performance (Bilgin, 2007). In summary, effective performance was the attainment of specific results required by the organization. It was consistent with policies, procedures, and organizational environment. The article took a view of how performance management process encompassed the way which people were managed and elements were included.

### **Competency model**

A competency model was a set of competency factors analyzed and generalized from the characteristics of superior performers at a certain job position. It was also an indicator system for job performance. It could be applied to recruitment, employment, education and training, human resource management, development and performance assessment. A model which could identify competency and link between strategies and HRM (human resource management) were highly needed (Yang et al., 2006). Competency modeling and competency assessment could link core competence and generic competencies. They were used to identify the key success factors driving performance in organizations (Lucia and Lepsinger, 1999). A competency model could divide a three-phase hierarchy into cluster, competency

and indicator (Figure 2). Here, cluster was a group of competency factors in a specific occupational category. Competency factors were classified in accordance with the posts or roles under the cluster. Indicators were assessment specifications under competency that could be measured and evaluated precisely (Wu and Lee, 2006). Based on Figure 2, the study developed hierarchy of competency model for personnel director as Figure 3. It would be discussed in the next paragraph.

Crawford (2004) criticized that recognized standards of competence models represented insufficiency. Drawing on the study of Boyatzis (1982) and Spencer and Spencer (1993), Crawford (2004) defined a model of competence that integrated knowledge, skills, demonstrable performance and core personality characteristics. Specially, personality characteristics were developed and assessed through training. Therefore, the researchers defined a competency model as an indicator that could presented ones competency elements.

### **Competency elements of jobs in helping and human service workers**

According to Spencer and Spencer (1993), workers could be classified into five clusters: technicians and professionals, salespeople, helping and human service workers, managers and entrepreneurs. The cluster of helping and human service workers included nurses, physicians, teachers, organizational-effectiveness consultants and alcoholism counselors. This cluster could be divided into two groups: caring helpers (people motivated by helping others) and influencing helpers (people who liked to communicate with others). Those who emphasized helping others were more likely to be "helping groups" who had moderate achievement, higher affiliative and moderate power motivation, while teachers, clergy and social workers were more likely to be "influencing helpers" who had low-moderate achievement, high affiliative and high power motives.

Spencer and Spencer (1993) proposed that "Achievement orientation was a concern for working well or for competing against a standard of excellence." The standard of excellence might be one's own past performance, an objective measure, the performance of others, goals set by oneself, or even what any individual had ever done. Positive affiliation referred to establishing personal relationships with others outside the professional setting. Power motives referred to meet a stronger underlying need for power. According to the study, superior personnel directors were divided into "helping and human service workers cluster". They tended to have high achievement in their tasks, high affiliative with employees and high power motives to do their jobs well. According to Figure 2 and the study, Figure 3 presented the hierarchy of competency model for personnel directors. Based on Spencer and Spencer's generic

competency model for helping and human service workers were listed in Table 1. This was the basic of questionnaires of the study for personnel directors in Taichung County.

## **RESEARCH FRAMEWORK**

The procedures of competency assessment were divided into six steps (Spencer and Spencer, 1993):

1. Defining the performance effectiveness criteria: Defining the criteria and standard for superior performance was the first and most important part of constructing a competency model. The performance effectiveness criteria of this article were the results of performance assessment which were held by the Taichung County Government during 2002 to 2007 (Table 2).
2. Identifying a criterion sample: Select the superior performance sample within the performance standards. After defining the performance standards and identifying the samples, the researchers select the average performance samples as the comparison. Therefore, there are 14 superior performance samples that received high-performance prizes and 34 average performance samples as the comparison in the study.
3. Collecting data: There are six methods for data collection; Behavioral event Interview, expert panels (e.g., Delphi), surveys, competency model database ("expert system"), job function/task analysis and direct observation. Which one is adopted is based on which style of competency model is used. The purpose, budget, and time are also concerned for the study. This research used generic competency model (Table 1) as survey method for questionnaires. The data collections were listed as Table 3.
4. Analyzing data and develop a competency model: The researchers analyze the data from observations or interviews to identify the personality, thought, motives, behaviors and skills that superior performers have and that average ones have not, and the competency model is developed accordingly (Table 4).
5. Validating the competency model: Three methods for validation are; (1) concurrent cross-validation - Collecting two criterion samples at same time, constructing the competency model from the first sample and validating the accuracy of the competency model in the second sample at a certain point in time. (2) Concurrent construct validation - Testing and predicting the second criterion sample of superior and average performers at a certain point in time. (3) Predictive validity - Verifying the competency model with the future performance of the employees to see whether it fitted the standards or not. This was the most powerful way to validate the competency model's ability to predict how people would perform in the future, rather than through traditional education, grades, test scores and credentials.

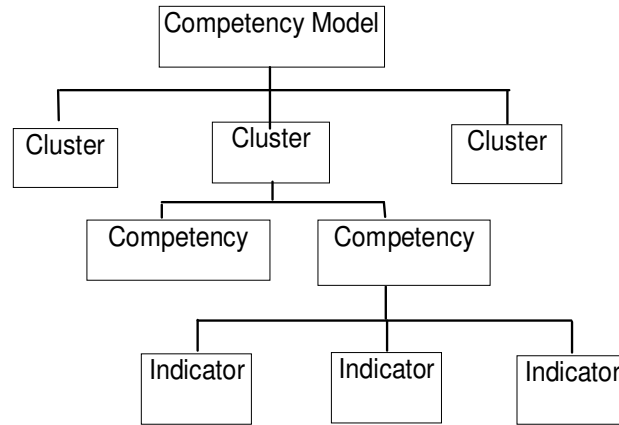


Figure 2. Hierarchy of competency model.

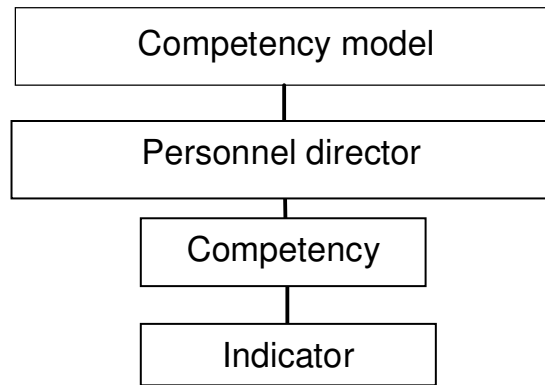


Figure 3. Hierarchy of competency model for personnel directors.

Table 1. Generic competency model for helping and human service workers.

Weight	Competency
	<b>Impact and Influence</b>
	Establishes credibility.
xxxxx	Tailors presentation, language to audience.
	Individual influence strategies.
	Uses examples, humor, body language, voice.
	<b>Developing others</b>
xxxxx	Flexible response to individual needs
	<b>Interpersonal understanding</b>
	Takes time to listen to others' problems.
xxxx	Is aware of others' moods and feelings, understands body language.
	Is aware of others' background, interests and needs.
	May understand long-term situation in depth.
	<b>Self-confidence</b>
xxx	Confident in own abilities and judgment.
	Takes responsibility for problems, failings.
	Questions, gives suggestions to their superiors.

Table 1. Cont'd.

	<b>Self-control</b>
xxx	Keeps own emotions from interfering with work. Avoids inappropriate involvement with clients, etc. (Stress-resistant, has stamina, humor)
	<b>Other personal effectiveness competencies</b>
xxx	Accurate self-assessment learns from mistakes. Occupational preference: finds work enjoyable. Organizational commitment: aligns self with mission. Affiliative interest: genuinely likes people. Positive expectations of others.
	<b>Professional expertise</b>
xxx	Expands and uses professional knowledge
	<b>Customer service orientation</b>
xxx	Discovers and works to meet underlying needs. Follows through on questions, requests, complaints.
	<b>Teamwork and cooperation</b>
xxx	Solicits input, credits and cooperates with others
	<b>Analytical thinking</b>
xxx	Sees causal relationships, inferences. Systematically breaks apart complex problems.
	<b>Conceptual thinking</b>
xx	Recognizes patterns, uses concepts to diagnose situations. Makes connections, theories. Simplifies, clarifies difficult material.
	<b>Initiative</b>
xx	Does more than is required in job. (Responds quickly, decisively in a crisis)
	<b>Flexibility</b>
xx	Adapts style, tactics to fit the circumstances
	<b>Directiveness/Assertiveness</b>
xx	Sets limits, says no when necessary. Confronts problem behavior.

"Weight" refers to the relative frequency with which each competency distinguishes superior from average performers. Note: Indicators in parentheses are relevant only to some helping and service workers.

In this study, the researchers adapted concurrent construct validation method to validate the competency models.

6. Preparing applications of the competency model - The developed competency model was applicable to practices such as selection, career pathing, performance management, succession planning, training and development, compensation and management information systems. In the study, the competency model of superior personnel directors was suggested to be used to train, develop and promote for personnel directors in governments.

## MATERIALS AND METHODS

### Sample

The sample of this study consisted of 48 personnel directors from public elementary schools in Taichung County, a major district in Taiwan. Taichung Country Government had evaluated the performance of personnel branch directors of public elementary schools every year since 2002. Coded questionnaires were distributed to 14 superior directors (study 1) and 34 average ones (study 2). Directors in study 1 were mostly males (12 members; 85.7%), comparatively young (57% were 30 - 40 years of age, 43% were 40 - 50 years of age), and fairly well educated (35.7% had completed

**Table 2.** Personnel directors that received high-performance prizes.

Year name	2002	2003	2004	2005	2006	2007
A	x	x	x	x	x	x
B	x	x	x	x		
C	x	x		x		
D	x	x		x		
E	x	x				
F	x	x				
G		x	x			
H				x		x
I	x					
J		x				
K		x				
L					x	
M					x	
N						x

\*Collected from the Taichung Government's secondary papers in 2002-2007.

**Table 3.** The statistical analysis of the Taichung County personnel director's competencies.

Competency	Competency strength		Difference
	Study 1 (n = 14)	Study 2 (n = 34)	Total (n = 48)
Impact and influence	4.50	4.24	0.26*
Developing others	4.14	3.97	0.17
Interpersonal understanding	4.57	4.24	0.33*
Self-confidence	4.29	4.24	0.05
Self-control	3.93	3.97	-0.04
Other personal effectiveness competencies	4.43	4.01	0.42*
Professional expertise	4.43	4.01	0.42*
Customer service orientation	4.21	4.24	-0.03
Teamwork and cooperation	4.50	4.15	0.35*
Analytical thinking	4.29	3.94	0.35*
Conceptual thinking	4.36	3.97	0.39*
Initiative	4.50	4.21	0.29*
Flexibility	4.07	4.15	-0.08
Directiveness/ assertiveness	4.00	3.97	0.03

\*The researchers choose the difference over 0.20.

completed vocational college, 50% had completed university, and 14.3% had completed master's work). Directors in study 2 were half males (50%) and half female (50%), comparatively old (52.9% were 30 - 40 years of age), and fairly well educated (29.4% had completed vocational college, 64.7% had completed university and 5.9% had completed master's work).

**Measure**

Measures were collected from personnel directors, except for the rankings of performance (Table 3). The scale in Table 1 was adapted from Spencer's competency factors for helping and human service workers. Unless otherwise noted, all multi-item scales were

measured on a Likert scale (1="strongly disagree," 5="strongly agree"). All scales were translated from English into Chinese. After reviewing the literature, this study constructed the competency model of superior personnel directors (Table 4) based on job competence assessment method with reference to Spencer's Job Competence Assessment Process (Table 1). The six steps of construction were as follows:

**Step 1: Define the performance effectiveness criteria**

The performance effectiveness criterion of the competency model in this paper was receipt of the high-performance prize given by Taichung County Government between 2002 and 2007.

**Table 4.** The competency model of superior personnel directors.

<b>Strength</b>	<b>Competency</b>	<b>Competency indicators</b>
4.57	Interpersonal understanding	Takes time to listen to others' problems Is aware of others' moods and feelings, understands body language Is aware of others' background, interests and needs May understand long-term situation in depth
4.50	Impact and Influence	Establishes credibility Tailors presentation, language to audience Individual influence strategies Uses examples, humor, body language, voice
4.50	Teamwork and Cooperation	Solicits input, credits, and cooperates with others
4.50	Initiative	Does more than is required in job (Responds quickly, decisively in a crisis)
4.43	Other personal effectiveness competencies	Accurate self-assessment, learns from mistakes Occupational preference: finds work enjoyable Organizational commitment: aligns self with mission Affiliative interest: genuinely likes people Positive expectations of others
4.43	Professional expertise	Expands and uses professional knowledge
4.36	Conceptual thinking	Recognizes patterns, uses concepts to diagnose situations Makes connections, theories Simplifies, clarifies difficult material
4.29	Analytical thinking	Sees causal relationships, inferences Systematically breaks apart complex problems
4.21	Customer service orientation	Discovers and works to meet underlying needs Follows through on questions, requests, complaints
4.14	Developing others	Flexible response to individual needs
4.07	Flexibility	Adapts style, tactics to fit the circumstances
4.00	Directiveness/ Assertiveness	Sets limits, says no when necessary Confronts problem behavior
3.93	Self-control	Keeps own emotions from interfering with work Avoids inappropriate involvement with clients, etc. (Stress-resistant, has stamina, humor)
3.93	Self-confidence	Confident in own abilities and judgment Takes responsibility for problems, failings Questions, gives suggestions to their superiors

Note: The list is ranked from Table 3.



### **Step 2: Identify a criterion sample**

Above the performance effectiveness criteria, the researchers got 48 samples. The researchers separated the samples into two studies: 1 and 2. Study 1 included 14 superior personnel directors. Study 2 included 34 average personnel directors. It would be discussed in the next paragraphs.

**Study 1:** it was made up of 14 superior personnel that had received high-performance prizes. Table 2 listed the fourteen ones during 2002 to 2007.

**Study 2:** It was made up of 34 average personnel directors that had never received any high-performance prizes.

### **Step 3: Collect data**

This study employed the generic competency model constructed by Spencer in 1993 and the McClelland/McBer job competence assessment method as an analytic basis for constructing the competency model of superior personnel directors. As Rothwell and Kazanas (1993) indicated that questionnaire survey approach was popular in collecting the data and could be tailored to the competency model. As was stated above, the researchers sent questionnaires to 48 public elementary schools in Taichung County and all of questionnaires returned.

### **Step 4: Analyze data and develop a competency model**

All 14 item scales in the questionnaires were measured on a Likert scale (5="strongly agree," 4="partly agree," 3="agree," 2="partly disagree," 1="strongly disagree"). The researchers got an average weight score from samples. The statistical analysis of the collected data from the questionnaires was shown in Table 3. A higher score indicated that the samples were more inclined to have the specific competency element. After comparing the competency strength between study 1 and 2, the researchers would discuss the difference over 0.20.

### **Step 5: Validate the competency model**

Through a concurrent construct validation method, the assessed samples of this study were two different groups: superior (14 personnel directors) and average performers (34 personnel directors). Table 3 showed competency strengths of study 1 and 2. Data from study 1 were then analyzed together to further refine and cluster as Table 4. The competency model of superior personnel directors indicated the required competencies of superior personnel directors in Taichung County.

### **Step 6: Prepare applications of the competency model**

The competency model was applicable to practice such as selection, career pathing, performance management, succession planning, training and development, compensation, and management information systems. Career pathing referred to planning future job assignments designed to give employees specific competencies. Succession planning referred to identifying candidates to replace incumbents in higher jobs. Training and development referred to training, job assignments or mentoring relationships that increased employee competencies. Compensation referred to determining fixed or performance-based pay (Spencer and Spencer, 1993).

## **RESULTS**

The researchers had checked the list of personnel directors in public elementary schools between 2002 and 2007 in order to avoid the problem of missing samples. The researchers even tracked the superior personnel directors who were promoted into another school to get their questionnaires. After completing steps 1 - 5, this study contributed to constructing the competency model of superior personnel directors (Table 4). The literature and studies indicated that the performance result of a bureaucracy related closely to the competency model and personality features. Accordingly, the researchers proposed conclusions according to the results of this study. When comparing the competency strength between study 1 and 2 (Table 3), there were eight competency elements which the difference were over 0.20. These were "impact and influence", "interpersonal understanding", "other personal effectiveness competencies", "professional expertise", "teamwork and cooperation", "analytical thinking", "conceptual thinking", and "initiative". In other words, study 1 presented individual influence strategies to their clients than study 2 did. They used examples, humor, body language, voice to influence theirs. They also used to take time to listen to others' problems and were aware of others' moods, feelings and needs. They might understand long-term situation in depth.

Study 1 could do self-assessment accurately than study 2 could. They learned from mistakes and found work enjoyable. Hence, they could expand and use professional knowledge and cooperate with others effectively. When facing problems, study 1 broke apart complex problems systematically and responded quickly, decisively in a crisis. They saw causal relationships, inferences of the crisis. They often did more than was required in job. Public personnel directors must be both effective and efficient. Hence, the performance of public personnel directors should be considered as an important part of public administration. A person's competency reflected one's capability or what one could do. According to Table 4, the most important competency for superior personnel directors was interpersonal understanding. Superior personnel directors were aware of others' background, interests and needs than average ones were. That was the reason while they were easy to be succeed than the other personnel directors. In the study, the competency model of superior personnel directors was suggested to be used to train, develop and promote for personnel directors in governments.

The competency model of superior personnel directors in the study was similar to Spencer's generic competency model for helping and human service workers with the exception of self-control comparing (Tables 1 and 4). "Self-control" meant that one kept his own emotions from interfering with work and avoiding inappropriate involvement with clients. The study provided the evidence

which superior personnel directors in Taichung County Government were lack of this competency.

## DISCUSSION

The researchers surveyed personnel directors from 48 public elementary schools in Taichung County over the period 2002 to 2007, and constructed the competency model of superior personnel directors. The contributions of the research had not been stated by other researches before. The contributions of this study could be summarized as follows. On the academic side, this study constructed a competency model based on the job competence assessment method. Moreover, this article highlighted that behavioral characteristics and competencies would affect performance results. This had been examined in the study.

On the practical side, it was proposed that the authority of the Taichung County Government should prepare to evaluate and understand their employees' characteristics. Furthermore, it should emphasize the job competence assessment method-based model and construct a competency model for recruitment, assessment, selection, succession planning, human resource management and development for personnel directors in the future. This was in agreement with the findings of Cappelli (2003). An appropriate competency model could help average employees understand and adapt to the changes in their jobs. According to the empirical evidence, it would improve average employees' effectiveness. Naquin and Holton (2003) mentioned that, if employees were successful in performing their tasks, no additional training is required. If they were not successful, competency-based training should be targeted at the specific areas requiring attention.

Finally, but very importantly, considering the HRM applications of competency research, the researchers suggested that the Taichung County Government should analysis the different competencies between superior personnel directors and average ones. The authority should train its personnel directors and design the training course on the basis of the competency model of superior personnel directors for effectiveness.

In spite of above-mentioned contributions, there were some limitations to the study results. First, the research subjects were personnel directors of Taichung County Government in the middle part of Taiwan. This restrained the generalizability of the results as Taylor et al. (2008) mentioned. The research had constructed a competency model, but it still needed further exploration to examine if there were other variables moderating personnel directors' effectiveness. Second, while this study focused on the job competence assessment method, many other variables were also worthy of consideration. These included perceived organizational support and job satisfaction. Third, this research was a longitudinal study over a six-year period, and it was difficult to control all of

the samples for other inexperienced researchers. It was difficult to do large samples research in the future, although the researchers had tracked the superior personnel directors who were promoted into another school to collect their questionnaires.

Owing to the above limitations, there were some suggestions for future studies. First, the research had constructed a competency model in Taiwan, and an extension to other countries for empirical study was recommended. Second, a series of training programs that were based on the competency model of superior personnel directors were encouraged. This could be designed to more rigorously describe the effects of competency model. Third, other moderating variables such as perceived organizational support and job satisfaction could be considered in future studies. Last, there was room for measurement improvement concerning the procedures used in the study. As Calo (2008) proposed, "organizations did not see the need for these competencies when they were downsizing and restructuring, so the recruitment function and retention strategies eroded." Researchers and governments would be highly rewarded if they could notice these problems and continue in the direction.

## Conclusion

The major findings of this study indicated that superior personnel directors who compared to average personnel directors tended to be aware of others' moods and feelings. The study also added to the understanding that the superior directors performed better than the average ones did in some competencies such as impact and influence, interpersonal understanding, other personal effectiveness competencies, professional expertise, teamwork and cooperation, analytical thinking, conceptual thinking, and initiative. The superior directors also had good professional knowledge than average ones had. They could see causal relationships, and were willing to take time to listen to others' problems. That was why they, according to these competencies, were more likely to receive awards in comparison to the other directors.

In summary, the Taichung County Government should train and recruit their personnel directors according to these competences for improving their performance. A series of training programs which were based on the competency model of superior personnel directors were encouraged. This competency model based on the job competence assessment method in the study could benefit other elementary schools in the identification and evaluation of their current and future directors.

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