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CONSTRUCTION OF A MANAGEMENT COMPETENCY SCALE FOR SITE MANAGERS OF PROPERTY MANAGEMENT COMPANIES

Nai-Hsin Pan

Professor, Department of Construction Engineering, National Yunlin University of Science and Technology, Taiwan(R. O. C.)
E-mail: pannh@yuntech. edu. tw

Ren-Yi Kung
Ph. D. Student. Graduate School of Engineering Science and Technology
National Yunlin University of Science and Technology, Taiwan(R. O. C.)
E-mail: kung590324@gmail. com

Abstract

With limited land, dense population, and numerous high-rise buildings in Taiwan, the public has shown higher demands for the quality of life and the services of property management companies. As a result, the execution ability and service scope of property management companies have improved over the years. Property management is a people-oriented industry. Only with enthusiasm and profession-alism in the services provided could the companies sustain long-term development. Hence, the competency possessed by the site managers is the basis of the operation for property management companies. By means of literature review, this research invited experts, scholars, and industry managers for expert reviews on the ques-tionnaire. The survey was conducted on-site managers from property management companies in Taichung City, New Taipei City, Taipei City, Kaohsiung City, Taoyuan City, and Tainan City. A total of 500 questionnaires were distributed, and 465 samples were retrieved, including 439 valid samples, with a valid return rate of 87. 8%. The collected data were analyzed with exploratory factor analysis, and the scale was purified. This study then generalized 4 dimensions covering 33 items. Then the Cronbach's α test and relevant screening were carried out on the dimen-sions and items. The results showed good internal consistency and reliability of each dimension, and the α value met the criterion. The 4 dimensions were named "professional skill", "personality trait", "motivation trait", and "leadership skill". This "Management competency scale for site managers" developed by this re-

search can be provided to property management companies a reference tool for assessing the management competencies of site managers, selecting and promoting the outstanding first-line managers, thus further enhancing the corporate competitiveness.

Introduction

Research Background and Motives

In the past, property management in Taiwan was concentrated on apartment buildings or residential communities, and the scope of service was merely limited to the scope of industry" refers to access control, environmental cleaning, and other basic works. Hence, at that time, property management was equivalent to apartment building management and maintenance, which was classified as a labor- intensive service (Level III) in the real estate industry. It is also known as building management (Zhuo et al. , 2010).

Over time, due to the changes in community development, as well as people's increasingly higher demands on the quality of life and property management services, the original "Act for Apartment Building Management" was no longer applicable. In order to respond to the changes in the property management industry, the Executive Yuan passed the "Development Outline and Action Plan on Property Management Service Industry" in 2004. The complexity of modern structure, including variable combinations of design, scale, facility, proprietorship, and use intention, has resulted in more difficulty in management and higher demand for management expertise (Lin et al. , 2012).

The management competencies required by different industries vary. For instance, Jheng et al. (2006) indicated that the management competencies for IT managers include "leadership, innovation, action, emotional management, communication, and customer orientation". Lin et al. (2006) conducted in-depth interviews on bank managers, and concluded 24 management competencies, covering 5 competency groups: "cognition, planning, leadership, interpersonal relations, and professionalism". Lee (2009) pointed out that the professional competencies required by property managers are professional skill, professional knowledge, and professional attitude. However, studies on property management competency are still scanty. The literature review found that many studies have explored the core competencies required by managers in the high-tech industry, banking industry, and medical institutions; however, there are no relevant researches discussing the core competencies required by the site managers of the property management industry.

The services of the property management industry are people- centered, and enthusiastic and well-qualified site managers are the foundation to companies' sustainable operation. Therefore, the competency

possessed by site managers is the key to the operations of the property management companies. In addition, the main resource of property management is "human resources", and an important link in operational management is how to "select", "educate", and "retain" talents. The responsibility of site managers covers managing and maintaining community safety, playing the role of a communication bridge between the company and property owners. They should be able to transform and implement the plans and goals developed by the company into an action plan. Their main duties focus on management work, supported by operational work. Therefore, in addition to possessing knowledge and skills in management, site managers should have an enthusiastic attitude and strong ambition to improve the company's competitiveness, and thus, achieve three-win situations between the company, the property owners, and the site personnel.

This study aims to develop a management competency scale with good reliability and validity based on scale development procedures and scientific analysis methods. The proposed scale can serve as an effective manager assessment tool that can be widely applied.

Research Purpose

In order to effectively promote organizational change and development, and enhance organizational performance, this study aims to combine the manager's ability and working contents in order to establish a scale of management competency, which can meet with the property management company's requirements for human re-

sources. The proposed scale can provide a basis for assessing, promoting, reeducating, or replacing site managers, and even planning for future layout of human resources.

This research aims to achieve the following results:
1. To construct a management competency scale for site managers of property management companies.
2. To discuss the preferential assessment items for property management companies to promote their managers.

Literature Review

In order to construct a management competency scale for the site managers of property management companies, this research first discusses several important concepts in the literature review. The literature related to the definition of property management, Taiwan's property development, and the classification, competency, and management competency of managers is introduced.

Definition of Property Management and Taiwan's Property Development

The term "property management" was originated in the UK in 1860 (Huang et al. , 2011). The development of property management in European and American countries has a faster progress in comparison to Asian countries. The term "property" first used in the Asian region was by Hong Kong and was translated from the English word "property" (Wang, 2010). Property development in Taiwan started slightly later than other Asian countries. This section explains the definition of property management and the general situation of Taiwan's property devel-

opment.

Definition of Property Management

In general, "property" refers to different types of real estate, including building type or land type. The scope of property includes "building", "real estate", and "facilities and devices". In terms of the use type of buildings, properties can be classified into 8 types: commercial, store, residential, industrial, special, public, leisure, and comprehensive (Huang et al. , 2011).

According to the explanation of Merriam-Webster's Collegiate Dictionary, "property" refers to the asset an owner can dispose of arbitrarily, including the real assets of buildings, lands, facilities, and devices, as well as the special or public assets of airports, restaurants, hospitals, wharves, and roads. Although each country has different explanations for the definition of "property management", there is no great qualitative difference. The definitions of property management made by each country and relevant property institutions are listed in Table 1.

Currently, the property management industry in Taiwan combines the professional knowledge of management, science and technology, building, commerce, and investment, and provides professional maintenance and management on environments and buildings, as well as the services of life and commercial support to residents. Its services include property (building) planning service, professional consultation, and future asset investment and management. Thus, property management is indeed a "professional and all-around" service industry (Stone, 2008).

General Situation of Taiwan's Property Management Development

Taiwan's property management began to rise in the 1970s. Most people engaging in management work are in their mid-age or even older. As the management system has not been long established, employees' educational training and competency are not mature and the salary is not high. Thus, the turnover rate of first-line service personnel is high, and professionals in the management industry are in shortage. With the increase in national income, the urban economy develops rapidly, and the number of apartment buildings, commercial buildings, and congregated residential communities are generally increased. As a result, the demands for service quality gradually increase, and people need more professional property management service. At the end of the 1990s, there were 300 registered property management companies in Taiwan, among those, most of them were local companies, while only a few were invested by Japan or Hong Kong-based groups (Lee, 2009). The local property management companies mostly adopt the trial-and-error method to obtain their professional knowledge and learned from the large foreign companies, including property management concepts, electromechanical maintenance technology, cleaning techniques, and property management knowledge. Over the years, local companies gradually developed complete and comprehensive systems on property management, including security guards, cleaning, electromechanics, life services, public services, and lease management. The Executive Yuan passed the "Flagship Plan on the Development Outline and Action Program of the Property Management Industry" in the 2914th

meeting on November 10, 2004. The plan aims to expand the property management industry to a scale of 350,000 employees, 60,000 professionals, and NTD100 billion within 5 years.

While Taiwan's property management industry started later than other countries, the industrial scale has grown rapidly, beyond the scope of access control. With more services focused on property management and maintenance, as well as the integration of governmental policies in laws and regulations, personnel training, and the establishment of licensure systems, the professionalism of property management companies has been greatly improved.

Classification of Managers

Previous studies have reached different definitions on the term "manager" according to the different levels of organizational fields, such as leader, supervisor, and manager, and all of them hold specific positions where they have subordinates to be commanded and supervised. However, in practice, managers should be classified into the top or executive managers, middle-level managers, and front-line managers (Wu, 2002).

The top or executive managers refer to managers with decision-making power over the operations and management of the entire organization and are responsible for the operational results and final success of the entire organization. They are in the strategy layer or operation layer, which covers managing positions of assistant manager, vice-general manager, and general manager in a property management company.

Middle-level managers serve as a connecting link between the top managers and are responsible for communication and coordination. In addition to executing the policies formulated by superior leaders, middle-level managers are responsible for correctly passing and explaining the responsibilities of policies to subordinates, in order that the organization can become an outstanding team to successfully complete tasks. They are in the middle management layer, which covers managing positions of project supervisors, supervising managers, assistant managers, and managers in the property management company. They also act as the bridge for communications and transmissions between the building management committee and company.

The main duty of front-line managers is to execute and complete work goals to improve working efficiency and maintain high organizational goals. The managing positions of front-line managers include the building's site manager in the property management company, such as community managers, directors, or secretary-general. They are mainly responsible for the site management services and administrative affairs of the buildings, such as site security guards, cleaning, electromechanics, finance, meetings, contracting out projects, supervision, document signing and submitting, letter issuing, providing different services to property owners and tenants, handling complaints, services, and problem solving. In addition to the expertise and leadership, personality traits are very important indicators. They are the target group of this research.

Each link in an organization is important. The managers of all layers

have their respective duties, and a lack of managers in any layer will produce poor effects on the operations. In recent years, with the increase in national income, apartment buildings and congregate residential communities, the demands for quality service in property management have gradually increased. Therefore, professional property management companies need to effectively maintain both the service and facility of the buildings. The site managers of buildings represent the management ability and service attitude of the property management company, which has a significant effect on the professionalism and image of the companies.

Competency

Research and application of competency are greatly valued in academic and business circles at present. The essence and application of work competency can be seen in the various fields of human resources, including recruitment and selection, assessment and promotion, performance evaluation, and training development (Wu, 2002). The definition of competency is discussed according to the Iceberg Model, as follows.

Definition of Competency

Professor David McClelland at Harvard University was the first to propose the term "competency" in 1973, arguing that employees' intelligence and educational background are not the only factors to determine job performance. On the contrary, the behavioral attitude, cognition, and motivation in the workplace can bring excellent performance to enterprises (McClelland, 1973). Personal attitude, skill, knowledge, and behavior are all

observable performance dimensions incompetency, and they can provide continuous competitive advantages to organizations. According to the definition of Boyatzis (1982) , competency refers to some basic traits possessed by individuals that affect their job performance and make their performance more efficient. Spencer and Spencer (1993) defined competency as the underlying characteristics possessed by one person to understand an actual or expected response in work, or the performance affecting performance and behavior, which is also related to job duty. Competency refers to the fields of employees' personal potential, meaning that employees can present the expected performance or complete their work smoothly (Reynold, 1993). Zhong (2003) defined competency as the attitudes, skills, and knowledge possessed by the supervisors during the execution of authority. Although the definitions vary, generally speaking, the working attitude, knowledge, personality traits, skills, and behavior, which should be possessed to increase individual and organizational current and future performance, or successfully complete certain working tasks, are the conditions that should be possessed to coordinate the job (Lin, 2017).

Iceberg Model of Competency

Katz (1955) proposed that the competencies (interpersonal skills, professional skills, conceptual skills, etc.) possessed should also vary with different tasks. The Iceberg Model, as proposed by Spencer and Spencer (1993) , also follows the concept of Katz (1955) , which classified competency into traits, self-concept, knowledge, skills, and motivations:
1. Traits: traits refer to the performance

of some behaviors caused by some personal tendencies, such as stress tolerance or confidence.

2. Self-concept: it means that the personal value or attitude towards affairs or events can be understood from the test.

3. Knowledge: it refers to the handling procedures or methods of interpersonal relations or professional skills.

4. Skill: it contains observable or hidden skills, such as listening ability, deductive reasoning, or inductive ability.

5. Motivations: motivations refer to the potential thinking mode or demand to guide personal behavior or drive personal choice, such as a sense of achievement.

Skills and knowledge are explicit, can be seen and easily. Traits, self-concept, and motivations are implicit in the deep layer, are hard to find, and can be changed by means of experience, psychological counseling, educational training, etc. ; however, it is time- consuming and does not necessarily work (Spencer and Spencer, 1993).

Management Competency

Domestic and foreign enterprises attach great importance to the topic of "management competency", thus, this section discusses the management competency model and method to develop the management competency model.

Management Competency Model

The abilities required for work are known as the competency model, and behavior, skills, personal traits, and knowledge are hidden in each ability (Dalton, 1997). The competency model also refers to the competencies collected for some special positions (Scott, 1998). The competency model specifies the job duty, job description, and entry-level, and contains job tasks, activities, behavioral indicators, and work output, as well as the personal traits, skill, attitude, ability, and knowledge which should be possessed (Lin, 2017). A complete competency model generally contains one or several groups, and 2-5 competencies are contained in each group; each competency has a descriptive definition and 3-6 behavioral indicators. The specific behavior of competency can be developed in the work (Spencer and Spencer, 1993). Therefore, management competency does not merely contain a single dimension, but has different combinations of management competencies due to the various roles and duties; it is thus called the management competency model. The following section discusses the management competency models proposed in the previous literature, which are used as the reference basis for the measurement contents of this research.

Sevy et al. (1985) developed the Management Skill Profile (MSP) , which classifies management competency into 6 types: including communication ability, management ability, leadership ability, cognitive ability, interpersonal skill, and other abilities. There are a total of 18 management competency dimensions, including informing ability, oral communication, listening, written communication, planning ability, organizing ability, personal organizing and time management ability, leadership style and influencing ability, motivation ability, empowerment and control ability, training and development ability, problem analysis and decision making ability, interpersonal ability, financial abil-

ity, conflict management ability, personal ambition, personal adaptability and professional knowledge, and result orientation. Chang (1998) studied the important management competencies of the top or executive managers, middle-level managers, and front-line managers in Taiwan's enterprises for an empirical research. The results showed that the management competency demands for the managers in each layer are different. The competency demands required by the front-line manager include time management, work efficiency, emotional stability, learning attitude, and execution. Previous research into management competency models shows the management competencies necessary for managers, thus, this research applied the above-mentioned model as the basis to develop the measurement scale.

Developing the Management Competency Model

The definitions of management competency model in previous literature are different, but can be categorized into 3 types (Wu, 1984) :

1. Trait Approach: it emphasizes the manager's unusual traits, which are different from ordinary people, and considers that the success of managers, to some extent, depends on their personal traits that are different from ordinary people. However, this approach easily ignores the existence of subordinates and excessively emphasizes the role of the manager; besides, personal traits are complex and the relevant importance cannot be easily determined, thus, it is difficult to conclude the personal traits unanimously agreed by successful managers (Wu, 1999).

2. Functional Approach: it considers that management ability is not an inherent ability, but developed. A manager's required management ability is based on job demands, instead of the potential presented in the job performance (Katz, 1955). Sandwith (1993) indicated that the proportion of manager's required management abilities varies with the different tasks and positions, and proposed the competency domain model, which considers that management ability includes the leadership domain, conceptual domain, administrative domain, interpersonal domain, and technical domain. It is concluded in the book Successful Manager's Handbook, by Davis et al. (1996) , that a successful manager should possess the following 9 skills: communication skill, administrative skill, leadership skill, interpersonal skill, motivation skill, organizing knowledge, thinking skill, self-management skill, and organizing strategy skill.

3. Situational Approach: the Situation Approach suggests that the situations faced by managers create successful managers, the key success factors of managers lie in the situations they face, and there are no great differences in their personalities, abilities, or traits.

According to the above literature review, the management competencies required by managers vary with the different layers. In terms of property management work, site managers must possess the ability to lead a management team (site security guard and secretary) , understand the professional knowledge related to apartment building management, create on-site administrative documents, and identify and solve problems. Thus, the manager's

personal traits are also an important reference indicator of management abilities. Therefore, this research developed the management competency scale for site managers of property management companies based on the Iceberg Model of Katz (1955) , Sevy et al. (1985) , Sandwith (1993) , Spencer and Spencer (1993) , as well as the foreign and domestic management competency scope and scale provided by David et al. (1996) , Chang (1998) , and Zhong (2003). This research concluded 8 initial dimensions, including interpersonal skill, conceptual skill, administrative skill, leadership skill, professional skill, ability trait, personality trait, and motivation trait, which are used as the basis to develop the questionnaire items according to the relevant issues discussed in the expert focus group interviews.

Research Method

This research constructed a management competency scale for the site managers of property management companies with good reliability and validity. Besides referring to previous literature, this study followed the scale construction procedure and scientific analysis. The construction procedure, sampling design, and analysis method are described as follows:

Construction Procedure of the Management Competency Scale

Step 1: define the research field: the first step is to clearly define the research field and scope to be measured, thus, it is necessary to have a correct and sufficient understanding of the constructs to be measured before scale construction, in order that wrong definitions will not be imported into the scale contents.

Step 2: produce the initial items: literature review, focus groups, and expert interviews are used to design the initial items.

Step 3: sort out the questionnaire items: this step is based on the questionnaire items sorted out in Step 1 and Step 2.

Step 4: collect the materials (distribute questionnaires) , the questionnaires are distributed according to the items developed in Step 3.

Step 5: purify the scale: the scale is purified according to the questionnaire results obtained above: (1) before factor analysis, it is necessary to test whether the materials are suitable. According to Kaiser (1974) , a large KMO value (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) indicates that there are more common factors between the variables and factor analysis is more suitable; (2) exploratory factor analysis (EFA) was conducted according to the scale items and Tabachnick and Fidell (2001) ; items with factor loading lower than 0. 45, factors with more than 2 items, items with factor loading greater than 0. 45, and factors with a single item were deleted; (3) convergence results were tested. In the case of no convergence, the first 3 analyses were repeated until the factor was stable; at this stage, the relationship between dimensions and factors is not clear, so that EFA was used to test the factor structure; (4) the correlation between item and total score was tested in terms of mutual relationship between the scale items, dimensions, and overall construct. Any suddenly reduced item in its dimension, as compared with other items, and lower than the general criterion of 0. 4, was deleted.

Step 6: complete scale construction: in

terms of the overall process of scale construction, from the initial draft, purification of the scale, and EFA to the completion of the reliability test, the scale was completed and passed the standard of scale construction.

Sampling Design

1. Definition of the research population: the targets were registered property management companies for buildings in Taiwan.

2. Sampling subjects: site managers of property management companies.

3. Sampling method: a total of 500 competency scale questionnaires were distributed to the property management companies located in Taichung City, New Taipei City, Taipei City, Kaohsiung City, Taoyuan City, and Tainan City. In order to make the sampling result close to the population, the questionnaires were distributed according to the proportion of the above-mentioned 6 property management companies, namely, 109 questionnaires for Taichung City, 109 for New Taipei City, 105 for Taipei City, 84 for Kaohsiung City, 75 for Taoyuan City, and 18 for Tainan City. In terms of the distribution method, the questionnaires were distributed to the top or executive managers of the property management companies in person in Kaohsiung City and Tainan City, through emails (with self-addressed envelopes) in Taichung City, New Taipei City, Taipei City, and Taoyuan City.

4. Sample data: after the questionnaires were retrieved. invalid samples were manually deleted, and statistical software SPSS was used to analyze the respondents' basic background data.

Analysis Method of Scale Construction

After the literature review, the initial dimensions and abilities were concluded and summarized. Scholars, experts, and managers in the property management industry were invited to discuss the relevant issues on the questionnaire items, and the questionnaires were distributed. After invalid questionnaires were deleted, the valid data were encoded, and statistical software SPSS for MAC 21 was used to process the collected data. According to the research purpose and the need for scale verification, several statistical methods were adopted, such as descriptive statistics analysis, exploratory factor analysis, reliability analysis, and internal consistency analysis.

Scale Preparation Procedure

The management competency scale for site managers of property management companies was developed in this research, as based on the results of literature review and expert interview. The scale construction procedure adopted in this research was complete and strict, as described below:

Generation of Questionnaire Items

Based on the literature review, this research summarized 8 dimensions. A focus group consisting of 2 professors, 4 property management experts, and 8 graduate students was conducted to discuss the types of competencies to be possessed by site managers of property management companies. The discussion lasted about 1 hour and 50 minutes. The participants stated their opinions and reached a consensus on the meanings. Then qualitative analysis software MAXQDA was used to match the de-

scription with the corresponding items based on the literature review and discussion results. Data encoding was completed, and semantic convergence was conducted for the encoded data. A total of 33 questionnaire items were summarized.

Data Collection (Distributing Questionnaires)

The subjects of this research were site managers of property management companies in Taichung City, New Taipei City, Taipei City, Kaohsiung City, Taoyuan City, and Tainan City. The Likert 5-point scale was adopted. A total of 500 questionnaires were distributed according to the proportion of the property management companies in the 6 cities, and 465 questionnaires were retrieved, including 439 valid samples, with a valid return rate of 87. 8%. The general information of the subjects is shown in Figures 1 to 4.

Scale Purification

1. EFA: this research adopted the varimax rotation of principal components analysis, and the number of the factors was extracted according to the criterion that the eigenvalue is greater than 1 to conduct factor analysis. According to Kaiser (1974) , when the KMO value is greater, it means that there are more common factors between the variables and factor analysis is more suitable. According to Bartlett's sphericity test, if its chi-square value achieves a significant level, it means that common factors exist between the variables and factor analysis is suitable (Chen, 2000). The results showed that the KMO value is 0. 971 and the chi-square value of Bartlett's test of sphericity is 10607. 777, which achieves a significant level

(p < 0. 000) ; 4 factors are obtained, the factor loading of each item is greater than 0. 45 and its total explained variance is 63. 514%.

2. Internal consistency analysis: after the EFA, Cronbach's α value is tested against the new factor items. If the new dimension's α value meets the standard, scale purification analysis is ended. If the new dimension's α value does not meet the standard, correlation analysis of item and the total score is used to screen items to increase reliability. After analysis, the first factor's Cronbach's α value is 0. 935, the second factor's Cronbach's α value is 0. 905, the third factor's Cronbach's α value is 0. 898, and the fourth factor's Cronbach's α value is 0. 898, which meet the reliability standard of the α coefficient proposed by Cuieford (1965). The total correlation values of revised projects among all the items are greater than 0. 5, thus, scale purification analysis is ended.

Factor Naming (Completion of Scale Construction)

After scale purification analysis, 4 factors including 33 items were obtained. The first factor includes 11 items: 7, 6, 5, 18, 17, 15, 13, 14, 16, 4, 12. According to the literature review and expert discussion, the items are related to professional skill, interpersonal skill, and administrative skill, thus, they are grouped under the dimension of "professional skill". The second factor includes 8 items: 27, 21, 22, 24, 25, 26, 19, 20. They are related to personal trait and ability trait, thus, are grouped under the dimension of "personality trait". The third factor includes 7 items: 30, 31, 32, 33, 28, 23, 29. They are related to motivation trait,

thus, are grouped under the dimension of "motivation trait". The fourth factor includes 7 items: 1, 3, 2, 10, 11, 9, 8. They are related to leadership skill and conceptual skill, thus, are grouped under the dimension of "leadership skill".

EFA was adopted to incorporate the items into the dimensions. For the reliability test, Cronbach's α coefficient was used to conduct internal consistency analysis against the items under the same dimension. The results showed that the dimensions all meet the reliability criterion. At this point, all the items and dimensions passed the tests, and the formal scale was thus finalized (see Table 2). Descriptive analysis was conducted on the respondents to obtain the average mean and standard deviation of the various dimensions and items.

Differential Analysis of the Items

The items of the 4 dimensions and the items from the initial dimensions were compared to identify their differences, which are described, as follows:

1. Dimension of professional skill: the comparison found that the items "Have the skill in conflict management", "Have the skill in oral communication", "Have the skill in interpersonal coordination", "Be familiar with working content and professional knowledge", "Be able to apply the relevant expertise, tools, and equipment to improve working efficiency", "Have a thorough understanding of the working procedures and methods (every day, every week, every month and every year) ", "Have the skill in crisis management", and "Be able to manage time well (such as attendance and the completion of tasks assigned by the committee within the

set period) " are the same; while items "Prevent the same faults from reoccurring", "Be sympathetic with coworkers and residents in the service area", and "Be able to solve coworkers' problems and support term" are added. Where the items are added, the property management work is verified and described in practice, as shown below:

(1) In the aspect of "Prevent the same faults from reoccurring": the site manager represents the company's service quality and image. In spite of some trivial work in the community, losses to the buildings can be avoided if management is cautious and competent, and self-criticism and improvement are made to enhance the work performance. Therefore, not making the same mistake is one of the important reference indicators for a site manager's workability.

(2) In the aspect of "Be sympathetic with coworkers and residents in the service area": interpersonal interaction is very frequent in property management work. The site managers should put themselves in other's position and sympathize with others no matter whether they are faced with coworkers on the same site or engaged in work serving the residents. In this way, management and service works can be completed smoothly.

(3) In the aspect of "Be able to solve coworkers' problems and support them":

1. If customer complaints or losses are caused by staff's carelessness, site managers should step in to help solve the problem.

2. Dimension of personality trait: com-

parison found that items "Have a sense of responsibility", "Have an attitude of integrity", "Be confident with personal abilities", "Have good environmental adaptability", and "Be able to accurately execute and complete difficult tasks" are the same; while items "Have good personal financial control and management (such as card debt, investment, and bank loans) ", "Have enthusiasm during service", and "Have an active and positive attitude" are added. Where items are added, the property management work is verified and described in practice, as shown below:

(1) In the aspect of "Have good personal financial control and management (such as card debt, investment and bank loans) ": as site managers handle the management fees and pay the vendors, if they lack good personal financial control and management ability, it may increase the risk of embezzling fund, thus, losses would occur to the company and community.

(2) In the aspect of "Have enthusiasm during service" and "Have an active and positive attitude": in addition to solving the various problems occurring every day, site managers must actively plan and participate in routine management and maintenance work. Thus, service enthusiasm and an active and positive attitude are also required for site managers.

3. Dimension of motivation trait: comparison found that items "Seek personal outstanding performance in the team", "Have strong ambition", "Have excellent learning ability", "Have the courage to face the challenges in work", and "Have high-stress tolerance" are the same; while items "Highly identify

with the property management industry" and "Have high job stability and do not change jobs easily" are different. Where items are different, the property management work is verified and described in practice, as shown below:

(1) In the aspect of "Highly identify with the property management industry": the workload of site managers is heavy and their tasks are numerous. In addition to bearing high work pressure, they also represent the image and quality of the property management company. Therefore, when they highly identify with the industry, they can have excellent performance. As a result, a high degree of recognition for the property management industry is one of the conditions of excellent site managers.

(2) In the aspect of "Have high job stability and not change jobs easily": according to the variables of the demographic statistics in the questionnaire, most of the site managers have the seniority of 5 years or below (50. 0%) , indicating that turnover rate is high. Therefore, having high job stability, and not change jobs easily are important reference indicators.

4. Dimension of leadership skill: comparison found that items "Effect of personal involvement degree on the organization's future development", "Be able to hand down work experience and guide staffs", "Have the ability to connect links between the preceding and the following (superior and subordinate) to complete work tasks" are the same; while items "Meet the requirements for personal conduct", "Improve personal serviceability to meet the resident's particular requirements (such as language expression

and first aid) ", "Be able to actively care for coworkers' working status", and "Be able to fully give authority in management (such as empower deputy director and team leader) " are different. Where items are different, the property management work is verified and described in practice, as shown below:

(1) In the aspect of "Meet the requirements for personal conduct": in the work of building management, there is access to residents' privacy and community finances, thus, site managers must strictly observe personal conduct and norms, and should not disclose residents' privacy or embezzle community funds. In this way, professional requirements can be met.

(2) In the aspect of "Improve personal serviceability to meet the residents' particular requirements (such as language expression and first aid) ": for instance, when communicating with foreigners, foreign servants, foreign caretakers, or elderly people living alone in community buildings, site managers need to have communication ability in foreign languages and are able to provide first aid, so as to meet the requirements of the management site.

(3) In the aspect of "Be able to actively care for coworkers' working status": property management relies on staffs to provide the services, and high staff turnover leads to problems in site management. In order to reduce the staff turnover rate and ensure service quality, site managers should actively care for coworkers' working status.

(4) In the aspect of "Be able to fully give authority in management (such as empower deputy director and team

leader) ": the staffs handle the tasks in the hierarchy, the number of staffs in each community differs, ranging from groups of 3 staffs to groups of 40 to 50 staffs. When there are many staffs, the site manager should be able to fully empower the staffs to perform their respective duties.

Managerial Implications

The competency possessed by site managers is the basis of the operation of property management companies. Table 2 shows that, in the order of importance, the management competencies of site managers are respectively "personality trait", "professional skill", "leadership skill", and "motivation trait". Thus, the property management companies should firstly attach importance to the site managers' personality traits. In addition to having a sense of responsibility and an attitude of integrity, being confident with personal abilities, having good environmental adaptability, and being able to accurately execute and complete difficult tasks, site managers must also have good ability in personal financial control and management, and be able do the trivial work in the community with enthusiasm and an active and positive attitude.

This research found that in "leadership skill", the item "personal conduct requirement" is related to the competency of site managers; however, according to the literature review, this item is not listed as a necessary condition of competency, which is the result of different industrial attributes. An analysis of the 33 items found that the average "personal conduct requirement" is the highest, reaching 4. 718.

As site managers are in charge of the management and maintenance of relevant equipment in the building, they are also familiar with the residents' work, rest, and privacy habits, and even handle community finances. Thus, it is necessary to strictly observe personal conduct and norms, and not cause losses to the community buildings, residents, or management companies. According to Lee (2011) , staffs may engage in immoral or inappropriate conduct, which is unacceptable. Any behavior harmful to social groups or other people that violates the common life interests of humans is known as "immorality". As site managers collect residents' management fees and pay the vendors, they may easily have "immoral" behavior, such as embezzling public money, if they lack good personal conduct.

Embezzling the community management fund could result in certain losses. For instance, in 2010, a site manager stole more than NTD 8 million in management fees from community buildings in Taichung City; in 2013, a site manager embezzled more than NTD 6. 1 million of community funds in Kaohsiung City; in 2018, a site manager embezzled more than NTD 4 million of community funds in New Taipei City. Such events would cause the property management company to bear higher compensation and legal responsibility, thereby endangering the business and produce significant effects.

Conclusion and Suggestions

The service scope of property management companies has become broad over time, thus requiring excel-lent management competencies. The following sections are conclusions, research limitations, and suggestions.

Conclusion

1. This research followed strict scale construction procedures and scientific analysis to develop a management competency scale for site managers of property management companies. The reliability and validity of the scale were tested. The scale comprises 4 dimensions, which are "professional skill", "personality trait", "motivation trait", and "leadership skill", (see Table 2) , totaling 33 items. The proposed scale can serve as a reference tool to recruit site managers and assess their performance. The assessed results are used as the basis by site managers to strengthen their management competency through training.

2. When a property management company carries out educational training on management competencies, it is necessary to stress personal conduct, carry out high-standard ethical training, and enhance their knowledge of the law, in order that site managers can have a better understanding of the legal responsibility they should shoulder, and thus, avoid violating the law. In addition, the companies should implement financial audits on the affiliated management buildings, in order to prevent possible exploitation on others. Therefore, when property management companies select and promote outstanding front-line managers, they must take "requirement for personal conduct" as a preferential assessment item to avoid the circumstance of site managers embezzling community funds.

Research Limitations and Suggestions

In terms of the management competency scale for site managers of property management companies, the questionnaires were distributed according to the proportion of the property management companies in Taichung City, New Taipei City, Taipei City, Kaohsiung City, Taoyuan City, and Tainan City. The scope could not be expanded to other counties and cities due to limitations in time and manpower. In addition, only site managers filled in the questionnaires, thus, the management competency scale may be subjective. Future researchers can expand their research scope to other counties and cities in Taiwan, and site security guards, secretaries, company cadres, and residents could be included, in order to collect more objective and multi-aspect data. Another concern is the construct validity of property management to explore its indicators and verify the validity of the management competency scale for the site managers of property management companies.

Table 1. Definitions Of Property Management In Each Country

Country and institution	Definition
British Institute of Facility Management, BIFM	It refers to integrating various professional activities in the buildings and the building environment, and systematically managing various activities.
International Facility Management Association, IFMA	It contains the professional management knowledge related to various trainings to ensure the normal operation of the function of the environment and buildings by integrating location, personnel, technology, and process.
Institute of Real Estate Management, IREM	It refers to maintaining, managing, selling, and operating the owners' assets according to their requirements and purposes.
Laws of Hong Kong (Item 2, Article 545)	It is stipulated by the laws of Hong Kong that property management is real estate management.
Chung Hua Property Management Association (2003)	It provides service works in the operation, management, maintenance, and construction aimed at persons, things, and objects in apartment buildings and communities. Its front-end services include the landscaping of building spaces, life functions, and function orientation. Its back-end services include food, clothing, housing, transportation, exercise, recreation, birth, senility, illness, and death, which are necessary for life. It thus provides a kind of all-around scientific, digitized, diversified, and multi-functionalized sustainable service.
Council for Economic Planning And Development, Executive Yuan (2004)	Aimed at the living environments and community services, as well as buildings, it provides all-around maintenance, management, and opera-

	tions. Its purpose is to let the building users have healthy, clean, and comfortable living spaces that consider natural conservation environments.
Wang (2004)	Property management is a management industry providing owners with services related to "building", "real estate", and "facility and device".
Chen (2004)	With the development of time, the term "property management" is constantly given new function definitions. "Property management" is a "comprehensive" concept and its connotation contains BM (building management, PM (narrow property management) , REM (real estate management) , and FM (facility management).
Hong Kong Institute of Real Estate (2005)	As an art related to control, management, and professional comprehensive services, it strives to provide properties with continuous high-quality operations, and at the best price, under the limitations of the legal system, finance, building, science and technology, and subjective emotions, in order to meet the diverse demands and expectations of each user and owner.
Ho (2012)	It means applying the management methods of planning, organization, leadership, and control to valuable land or building assets, which are manually formed to achieve operation, maintenance, and management.
Lee (2013)	It refers to an industry created for the purpose of managing the business of buildings and living environments, as well as management activities to establish, use, and maintain building facilities and devices. Property management can provide good maintenance and suitable management for buildings, and achieve the goal of improving the value of land building assets through operating management.

Source: Wang (2006) , Chan (2007) , Wang (2010) , and compiled by this research

Table 2. Management Competency Scale For Site Managers Of Property Management Companies

Dimension	Original item No.	Item	Cronbach's Alpha	Average mean	Standard deviation
Professional skill			0. 935	4. 382	
	7	Have skill in conflict management		4. 364	0. 6261
	6	Have skill in oral communication		4. 310	0. 6337
	5	Have skill in interpersonal coordination		4. 462	0. 6065
	18	Be familiar with working content and professional knowledge		4. 426	0. 5800
	17	Be able to apply the relevant expertise, tools, and equipment to improve working efficiency		4. 303	0. 6279
	15	Have a thorough understanding of the working procedures and methods (every day, every week, every month and every year)		4. 358	0. 6318
	13	Have skill in crisis management		4. 412	0. 6013
	14	Be able to manage time well (such as normal attendance and the completion of affairs arranged by the committee within the set period)		4. 442	0. 5818
	16	Prevent the same faults from reoccurring		4. 415	0. 6313
	4	Be sympathetic with colleagues and residents in the service		4. 442	0. 5739
	12	Be able to solve a colleague's difficulties and support colleagues		4. 264	0. 6399
Personality trait			0. 905	4. 396	
	27	Have a sense of responsibility		4. 417	0. 5982
	21	Have an attitude of integrity (such as not accepting presents or rebates from manufacturers)		4. 517	0. 5922
	22	Have good personal financial control and management (such as card debt, investment, and bank loans)		4. 435	0. 6373
	24	Have enthusiasm during service		4. 446	0. 5744
	25	Have an active and positive attitude		4. 392	0. 5825
	26	Be confident with personal abilities		4. 298	0. 6080
	19	Have good environmental adaptability		4. 323	0. 5533
	20	Be able to accurately execute and complete difficult tasks		4. 339	0. 5581
Motivation trait			0. 898	4. 229	
	30	Seek personal outstanding performance in the team		3. 950	0. 7688
	31	Have strong ambition		4. 148	0. 6781
	32	Have excellent learning ability		4. 303	0. 6019

|	33	Highly identify with the property management industry		4. 344	0. 6286
	28	Have the courage to face challenges in work		4. 264	0. 6032
	23	Have high job stability and not change jobs easily		4. 273	0. 5914
	29	Have high-stress tolerance		4. 319	0. 6107
Leadership skill			0. 898	4. 344	
	1	Meet the requirements of personal conduct		4. 718	0. 4896
	3	Improve personal serviceability to meet the resident's particular requirements (such as language expression and first aid)		4. 228	0. 6607
	2	Effect of personal involvement degree on the organization's future development		4. 296	0. 6366
	10	Be able to supervise colleague's working status		4. 319	0. 6144
	11	Be able to hand down work experience and guide subordinates' work		4. 298	0. 6301
	9	Have the ability to connect links between the preceding and the following (superior and subordinate) to complete the work task		4. 330	0. 6323
	8	Be able to fully give authority in management (such as give authority to deputy director and team leader)		4. 219	0. 6393

Source: Compiled by this study

Gender

Age

Fig 1. Gender

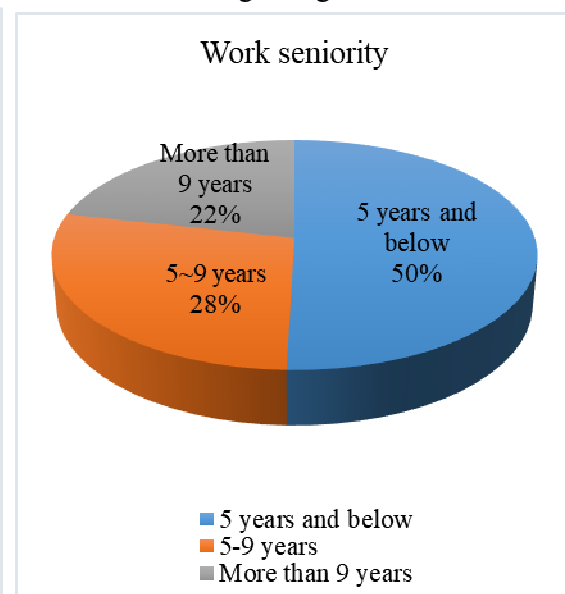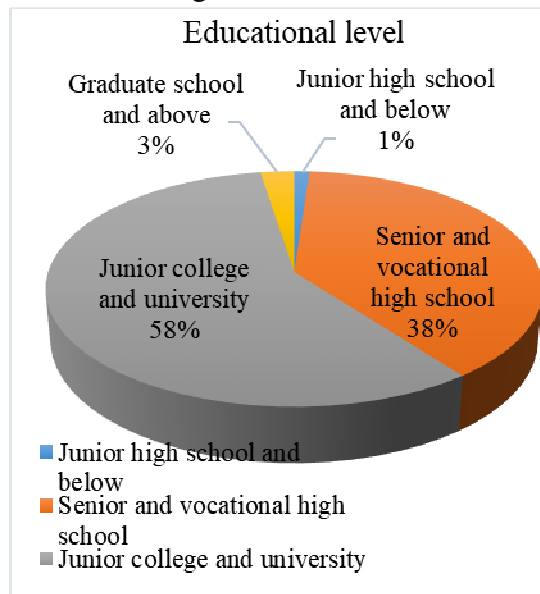Fig 2. Age
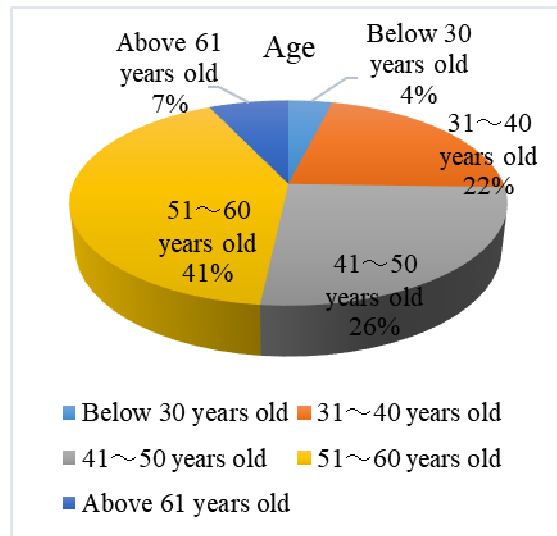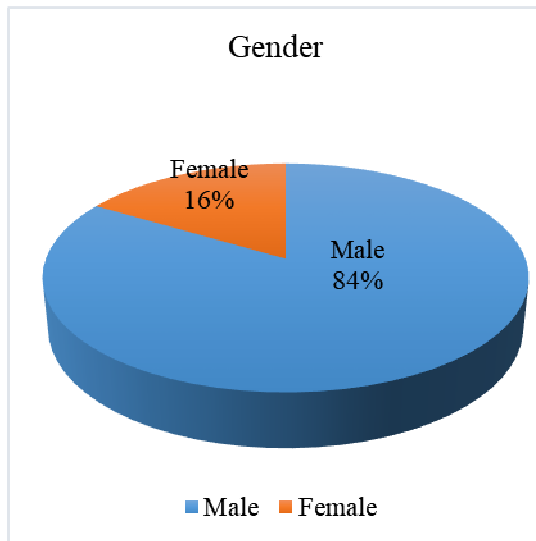
Educational level

Fig 1. Gender

Work seniority

Figure 3. Educational level

Figure 4. Work seniority

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