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ROLE AMBIGUITY AMONG SCHOOL PRINCIPALS IN CHINA AND FINLAND

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Tiivistelmä – Abstract

This study explores the role-ambiguity phenomenon among public secondary school principals in China and Finland. Organizational dysfunction caused by role ambiguity in professional organizations has been studied since the 1960s (Kahn et al, 1964). Although role ambiguity occurs most frequently in educational organizations, few studies on role ambiguity are found on school leaders.

This study contributes to this topic by building a multidimensional knowledge structure of role ambiguity among school principals. It applies a qualitative design with case study as its approach. The data was collected through ten individual interviews with upper secondary school principals in Shanghai and the Central Finland region. Thematic analysis was applied as the data analysis technique.

The findings proved that role ambiguity is a transactional process and it occurs throughout principals' career. Both internal and external elements can contribute to the formation of role ambiguity, but principals' coping strategies can largely influence the magnitude of role ambiguity.

Based on the findings, this study gives suggestions on principals' professional development. Principal training programmes could be more individualized and practical. Mentoring systems could be systematically applied. Furthermore, a collaborative leadership model can be sought as an option.

Asiasanat – Keywords

Role ambiguity, principalship, adaptation

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Tiivistelmä – Abstract

Tämä tutkimus tarkastelee rooliristiriitaa lukion rehtoreiden keskuudessa Kiinassa ja Suomessa. Rooliristiriitojen aiheuttamat häiriöt organisaatioissa ovat olleet tutkimuksen kohteena 1960-luvulta alkaen (Kahn et al., 1964). Vaikka rooliristiriitoja esiintyy yleisesti kasvatusalan organisaatioissa, löytyy vain muutamia tutkimuksia, jotka keskittyvät rooliristiriitoihin koulun johtajien keskuudessa.

Tämä tutkimus edistää alan tutkimusta rakentamalla moniulotteisen näkemyksen rooliristiriidoista rehtoreiden keskuudessa. Tutkimus on laadullinen tapaustutkimus. Aineisto on kerätty tekemällä kymmenen yläasteen rehtoreiden yksilöhaastattelua Shanghaissa ja Keski-Suomessa. Aineisto on analysoitu teema-analyysin keinoin.

Tulosten mukaan rooliristiriita on transaktionaalinen prosessi ja sitä tapahtuu rehtorin koko uran aikana. Sekä sisäiset että ulkoiset elementit voivat vaikuttaa rooliristiriidan muodostumiseen, mutta rehtoreiden sopeutumistavat vaikuttavat suuresti rooliristiriidan laajuuteen.

Tämän tutkimuksen perusteella voidaan antaa suosituksia rehtoreiden ammatilliseen kehittämiseen. Rehtoreiden lisäkoulutusten tulisi olla yksilöllisempiä ja käytännönläheisiä. Mentorointi voitaisiin myös ottaa systemaattisesti käyttöön. Lisäksi yhteisöllisen johtajuuden malli voitaisiin nähdä mallina johtamiselle.

Asiasanat – Keywords
Rooliristiriita, rehtorius, sopeutuminen

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LIST OF ACRONYMS

CPC	Communist Party of China
ECNU	East China Normal University
ECTS	European Credit Transfer and Accumulation System
ICT	Information and Communication Technology
MoE	Ministry of Education
NYCE	Nine-Year Compulsory Education
OECD	Organization for Economic Co-operation and Development
PISA	Programme for International Student Assessment

1 INTRODUCTION

Back in the 1960s, Kahn, Wolfe, Quinn, Snoek and Rosenthal first recognized role ambiguity as a prevalent stress in organizations, resulting from the boosting technology and the growing size of organizations. Role ambiguity is therefore considered as one of the antecedents of organizational stress. (Kahn et al., 1964, pp. 4 – 5.) Role-ambiguity refers to a situation where the role incumbent lacks sufficient role-related information or predictability on the outcome of his or her role behavior. (Kahn et al., 1964, p. 94; Rizzo, House & Lirtzman, 1970, p. 155.) In its recent development, role ambiguity is delineated as a transactional process of balancing the need and supply possessed by the environment and the individual in turn (Edwards et al., 1998, p. 2; Cooper, Dewe & O'Driscoll, 2001, p. 17). As a result, role ambiguity can cause stress, anxiety tension, and job dissatisfaction (Pearce, 1981, p. 667).

Organizations offering educational services are reported as the most common location for role ambiguity to take place (Rogers & Molnar, 1976, p. 603). However, most literature on role ambiguity in western countries is found in industrial sectors, or in organizations staffed by semi-professionals such as nurses, engineers and social workers. Role ambiguity study on academic leaders is rare and often mixed with role conflict study. It is even more difficult to find systematic role ambiguity studies in eastern educational settings, not to mention on school leaders. (Goldman & Chang, 1992, p. 3.)

The last three decades have witnessed profound changes brought by constant educational reforms to schools and principals' life. (Renihan, Phillips, & Raham, 2006, p. 13). Principals are required to embrace new perspectives, competencies and attitudes (Chapman, 2005, p. 8) and transform from pedagogical experts into school managers and leaders (Hill, 2002, pp. 43 – 45; Renihan et al., 2006, p. 11.) Few studies have examined the role-ambiguity phenomenon among professionals in public education sectors. They found role-ambiguity an important factor linked to a number of negative outcomes of school effectiveness (Bacharach, Bamberger & Mitchell, 1990, p. 415). Gmelch and Torelli (1993, p. 14.) found that role ambiguity is strongly associated with school administrators' burnout because of their extensive and ambitious role scale and responsibilities. On a macro level, Burns and Gmelch (1992, p. 28.) found that principals are caught in between their spiritual pursuit and the reality which confused them of whom they are and what they should do.

Intrigued by the scarcity of role ambiguity research on school principals and the increasing difficulty to ignore its existence, I decided to conduct a study on this topic. Shanghai and the Central Finland region (Jyväskylä as its regional center) came naturally to my mind as the locations for this study not only because I have extensive education experience in these two places but also for their international frame in PISA results (OECD, 2001; OECD, 2004; OECD, 2007; OECD, 2010) while the two countries have very different profiles. Finland is recognized for its pragmatism, quality, equality, decentralization and trust in its education system (Linnakylä, 2004, p. 200; Värri & Alava, 2005, p. 5; Aho et al., 2006, pp. 117 – 119; MoE, 2007, p. 14; Hargreaves et al., 2007, p. 17). China, on the other hand, is known for its high hierarchy, central governance, and the huge gap between the east and the west in educational development (Yang, 2006, p. 72; Yuan, 2005, p. 5.)

In both countries principals are loaded with high expectations and responsibilities (Hargreaves et al., 2007, p. 23; Wang, 2003, p. 12). Some Finnish principals reported they had contradictory expectations and they had to learn to handle them without adequate help (Johnson, 2007, p.11; Risku & Kanervio, 2011, p. 169). There is not enough Finnish literature exploring this problem and most of the researches tend to focus on teachers (MoE, 2007, p. 29). In China, there is evidence showing new principals have difficulty to adapt to their new roles and become stressed about their role behavior (Wang, 2003, p. 12; Zhu, 2003, p. 83). Tang (1996, p. 22) states role ambiguity does occur later in principals' career when their high need for achievement can not be fulfilled because of the uncertainty in available resources. This uncertainty leaves principals under psychological pressure. However, there are few studies exploring deeper in role ambiguity but a number of researches focusing on other kinds of job stress such as role conflict (e.g., Song, 2001; Wang, 2003; Jiang, 2008; Zhu & Ruan, 2008; Liao, 2009). Moreover, some studies show the presence of role ambiguity but are not recognized and they are included in role conflict studies (e.g., Zhu & Ruan, 2008, p. 214).

Role conflict means contrasting role expectations which are not possible to comply with (Kahn et al., 1964, pp. 19 – 20; Biddle, 1986, p. 82). It is often confused with role ambiguity and misused in studies (Pearce, 1981, p. 669; Goldman & Chang, 1992, p. 4). Thus, besides exploring role ambiguity in the two regions, this study intends to treat role ambiguity in its own right.

This study applies qualitative design with case study as its approach. The data was collected through interviews with ten principals in upper secondary schools in Shanghai and the Central Finland region and later analyzed with the thematic analysis technique.

The aim of the study is to first of all bring more comprehensive perspectives to the concept of role ambiguity and the challenging roles principals have to play nowadays. Secondly, it aims to probe the formation of role ambiguity among school principals and the possible solution to it. Thirdly, it expects that the findings will provide valuable information to practitioners in the two countries. It aims to inspire the practitioners to design more pertinent principal training programmes in the future.

Role ambiguity remains popular and it is considered more common than role conflict among employees. Most people find it stressful and inevitable, yet they do not know how to deal with it. (Greenberg & Baron, 2003, p. 124.) Thus, the uniqueness of the topic of this study will undoubtedly add more knowledge to the field. It will also raise the awareness of the role ambiguity problem that school principals face.

2 THEORETICAL FRAMEWORK

This study is built on the basis of role theory. In this chapter, perspectives from several mainstream leading scholars are reviewed and a clear-cut outline of role ambiguity model development is drawn, so as to provide a comprehensive understanding of role ambiguity and other major concepts as well as to introduce the elements of the role ambiguity model.

2.1 Role theory

Role theory believes that individuals' behavior is meaningful in terms of the roles they assume, and our society attracts individuals to get involved by assigning individuals roles in the form of work responsibilities. Role theory thus provides a special angle to understand the relationship between people and society. (Turner, 2006, p. 233.)

The word *role* has appeared as a concept in sociology since the early 20th century. The two critical concepts, the mind and the self, raised by Mead (1934) in *Mind, Self, and Society from the Standpoint of a Social Behaviorist* formed the foundation of role theory. The basic assumption of role theory is that people behave accordingly in social life as actors play according to the scripts. Though people behave differently, their behaviors are predictable according to the patterns and characteristics in the behavior and their role expectations which are generally accepted. (Biddle, 1986, p. 68.) The theory was widely explored in sociology and social psychology during the 1980s. It presumes that everybody has expectations for the behavior of themselves and others in their respective social positions and situations (Biddle, 1986, p. 67; Wang, 1993, p. 44). Vice versa, people's behavior reflects their social positions and the expectations associated with those positions in particular situations.

Instead of being named as a theory, role theory is argued to be an umbrella conceptual framework from which explanatory theories derive (Stryker, 1996, p. 486). One particular aspect of role theory that is applicable in this study is proposed by Getzels and Guba (1954, pp. 165 – 166). They point out that a role incumbent needs the expectations from his or her role senders so as to modify his or her behavior towards more approvals. Meanwhile, his or her own ego raises an expectation for his or her role as well. It is the mutual contribution of his or her expectation and the expectation from the environment that keeps him or her on track. Since the role incumbent is also one of the group members who defines his or her role, he or she may tend to accept the public expectation even if it does not comply with his or her own. The degree to which he or she compromises himself or herself to the public will depend on his or her personality. As a result, succeeding in fulfilling the role brings in rewards while failing in it could bring negative sanctions. (ibid.)

2.1.1 Basic role concepts

Based on the above mentioned, more complicated role concepts, such as role conflict and role ambiguity, emerged to capture the problems brought by the increasingly advanced social life (Tang & Chang, 2010, p. 870). However, some basic knowledge must be introduced before studying these advanced role concepts. The following basic concepts are compiled according to the classical definitions given by Kahn et al. (1964, pp. 13 – 17), whose work was credited as the first to introduce role concepts from an organizational perspective (King & King, 1990, p. 49).

Office is a unique point to locate an individual in a web of interrelated relationships and activities in an organization. Office is a virtual location in the organization's structure in role theory. It describes what the linkage between the individual and his or her fellows as well as the whole organization is.

Role refers to a range of possible behaviors expected by the individual who occupies the office or by this person's role set.

Role set is a network of people who are directly connected to the focal person's office, or people who can affect the focal person's work performance but are related to the focal person in some other way. For example, teachers, superintendents, spouse or close friends can be the role set of a school principal.

The members of a role set are called *role senders.*

Focal person is the individual whose role, office or role set is to be defined.

Role expectations refer to the perceptions held by the role senders about what kind of behaviors and personal traits the focal person should have for his or her role.

Role behavior is performed by the role incumbent within his or her system (e.g., an organization) while he or she is accepted as a member of the system.

The expectations role senders have communicated to the focal person are called *sent role*. A job description received by a principal, for example, can be a sent role.

Role pressures are role sending actions towards the focal person with an aim to ensure the role expectations are clearly understood by the focal person. For instance a principal may receive his or her role pressure when his or her superintendent demands a high performance of his or her school.

Received role refers to the focal person's own understanding of the sent role based on his or her perceptional and cognitive ability. It does not necessarily coincide with the sent role.

Each sent role pressure creates a psychological force with a certain magnitude and direction to the focal person. However it's the focal person's received role that corrects the magnitude and direction especially when the legitimacy of the pressure is questionable. The output of the aroused psychological forces adjusted by the focal person is then called *role forces*.

The focal person may be a *self role sender*. In other words, he or she also has his or her own expectations for his or her behavior and capacity which arouse internal motivational forces. (Kahn et al., 1964, pp. 13 – 17.)

In order to give a clearer picture of how the focal person is influenced by different motivational forces to achieve the role in a certain context, I designed the following figure (Figure 1) based on my understanding on the interrelations of the role concepts mentioned above.

The figure is inspired by the parallelogram rule of resultant of forces in physics. The general rule for combining two forces on the same object in physics is to form a parallelogram according to the magnitude of the vectors. The resultant force is the diagonal of the parallelogram which shares the same target object and carries a combined direction from the original two forces. (Addition of Vectors, n. d.)

The concepts of role forces and their mechanism on the focal person resemble the parallelogram method. Role forces have directions and magnitudes which are similar to vectors. The focal person in this figure receives the many forces which aim at shaping him or her to a certain role. This process can be broken down into two basic stages of force addition. The grey parallelogram in Figure 1 demonstrates the first stage where a single role force (F4) is formed according to the parallelogram rule. Based on the force (F3) created by role pressure from focal person's role set, he or she digests and creates one force (F2) based on his or her own understanding of F3. F2 might be the same as F3 or different. It all depends on how clear F3 is and how the focal person perceives reality. Hence the resultant F4 is formed. In reality, there are normally more than one role pressures produced by the role set. Therefore, the first stage presented in the figure shows only a simplified situation. More role forces can be formed in the same fashion.

On the other hand, as the focal person also has an inner drive for his or her role (F1), which triggers the second stage of force addition demonstrated by the striped upper parallelogram. At this stage, F4 and F1 are combined in the same way to find out the final force (F5) for role achieving.

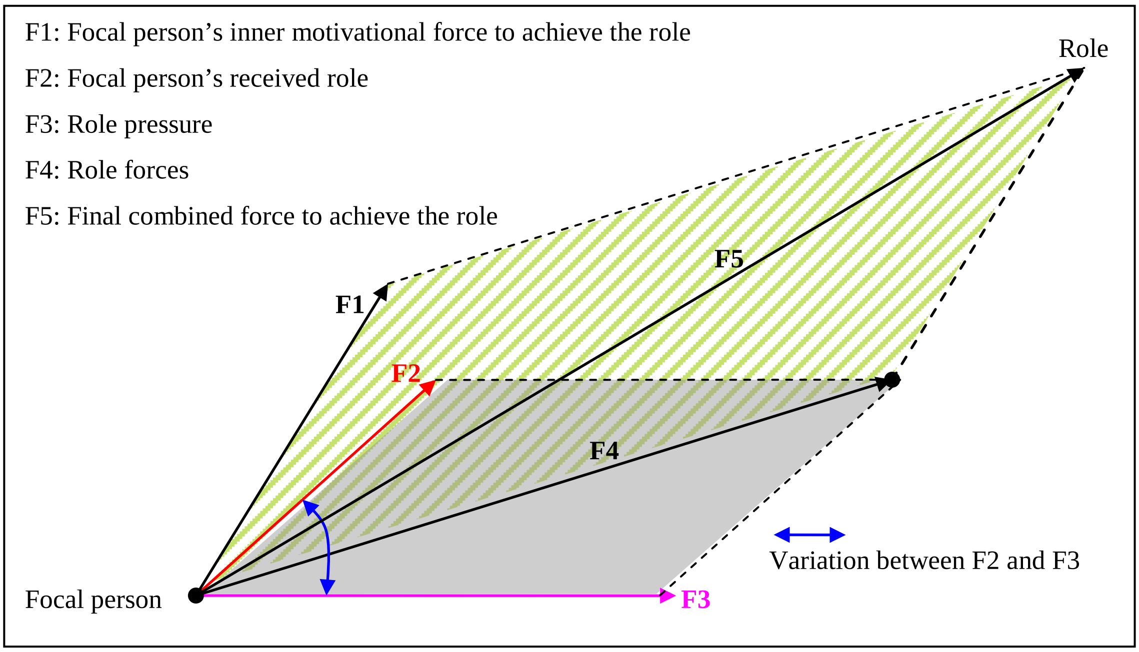

FIGURE 1. Resultant of role achieving motivational forces

Note that all the forces should be understood as received by the focal person, which explains why they all start from the focal person, even for external force like F3. This figure does not mean to provide precise calculation for the resultant role forces on the focal person, as in real life the outcome of the combined role forces might depend on many other factors.

2.1.2 Role ambiguity

Role ambiguity, together with role conflict, was first addressed by Kahn et al. (1964) systematically in their classic publication *Organization Stress: Studies in Role Conflict and Ambiguity,* which unveiled a new school of role theory study, organizational role theory (Pearce, 1981, p. 665; Biddle, 1986, p. 73; King & King, 1990, p. 49). They argued that speeding technology development triggered organizational expanding and vocational specialization which laid the ground for role ambiguity. Role ambiguity, together with role conflict, is considered as an antecedent of organizational stress (Kahn et al., 1964, pp. 2 – 5; Cooper et al., 2001, p. 38), or in other words, job-related stress (Greenberg & Baron, 2003, p. 124), or occupational stress (Frone, 1990, p. 309; Gmelch & Torelli, 1993, p. 15).

The definition of role-ambiguity contains two aspects: the predictability of the outcome of an individual's behavior, and the clarity of job expectations. (Kahn et al., 1964, p. 94; Rizzo et al., 1970, p. 155.) It is understood from the objective perspective and the subjective perspective. The objective ambiguity describes a condition of the environment where the necessary information for role behavior is lacking. The subjective ambiguity refers to how the objective ambiguity is experienced by a person. (Kahn et al., 1964, p. 23.) In the objective ambiguity, the lack of information means either the information needed does not exist or is not conveyed to the focal person in an adequate way. For example, the school teachers can withhold information from their principal or are not able to communicate clearly their expectations or the expectations are contradictory. In the last case, it can also be called a role conflict (see Kahn et al., 1964, p. 22 – 25).

In its recent development, role ambiguity has been redefined by many researchers. Naylor, Pritchard, and Ilgen (1980, pp. 154 – 156) portrayed role ambiguity in terms of job effectiveness. They perceived role ambiguity as the focal person's uncertainty on "product-to-evaluation contingencies". Pearce (1981, p. 670) argued that the classic dual-component-characterized role ambiguity concept brought operational difficulties. Hence she redefined role ambiguity as “experienced unpredictability due to information deficiency”, excluding the “experienced deficiency”. Breaugh and Colihan (1994, p. 191) argued the earlier role ambiguity studies lacked measurement instruments for different facets. Therefore they refined the term as job ambiguity and decomposed the concept into three aspects: “work method ambiguity, scheduling ambiguity, and performance criteria ambiguity”.

Although many researchers have attempted to shed more light on role ambiguity, the two classical definitions given by Kahn et al. (1964) and Rizzo et al. (1970) remain dominant (see e.g., Rogers & Molnar, 1976, p. 599; Gmelch & Torelli, 1993, p. 4; Wolverton, Wolverton, & Gmelch, 1999, p. 4; Mayers & Zepeda, 2002, p. 50; Shen, 2005, p. 1; Bunnell, 2006, p. 388; Tang & Chang, 2010, p. 870). Based on these aforementioned definitions, role ambiguity in general refers to a condition where the role incumbent lacks well-conveyed role-related information or he or she holds the unpredictability on the outcome of his or her role behavior.

2.1.3 Role conflict and its relation with role ambiguity

Role ambiguity is very often confused with the concept of role conflict in researches (Pearce, 1981, p. 669; Goldman & Chang, 1992, p. 4), hence it is necessary to illuminate the concept of role conflict before further exploring role ambiguity.

Role conflict refers to incongruent role expectations, which when complying with one, will cause difficulty to comply with another (Kahn et al., 1964, pp. 19 – 20; Biddle, 1986, p. 82). Rizzo et al. (1970, p. 151) further suggested that role conflict was caused by violating two principles in classical organization theory, namely, chain of command and unity of command. Similarly, role conflict can also be examined in two dimensions, as the objective conflict which results from the expectations from role senders, and as the subjective conflict which reflects the focal person’s experience of role conflict (Kahn et al., 1964, p. 380).

There are five types of role conflict: 1) intra-sender conflict, referring to the inconsistent expectations from the same role sender to the focal person; 2) inter-sender conflict, referring to incompatible pressures sent by different role senders to the focal person; 3) inter-role conflict, meaning that the role pressures that the focal person has from one membership group are different from those of another membership group; 4) person-role conflict, referring to the sent role pressures in conflict with the focal person’s own moral values; 5) role overload, which is seen as a combination of type 2) and 4) in a situation where all the pressures are legitimate and compatible but beyond the focal person’s ability to deal with all of them. (Kahn et al., 1964, pp. 19 – 20.) Nevertheless, some researchers tend to treat role overload as a separate division of role stress (Frone, 1990, p. 311; Cooper et al., 2001, pp. 39 – 40; Bauer, & Simmon, 2000, p. 3). Rizzo et al. (1970, p. 155) regrouped types 1), 2) and 3) as conflicting expectations and requests from the organization or others. Meanwhile, they added “time, resources or capabilities” as a new type of person-role conflict. Researchers tend to adopt either one of the typologies (e.g., Rogers & Molnar, 1976, p. 599; Gmelch & Torelli, 1993, p. 11).

Role conflict produces similar effects on the focal person as role ambiguity. It produces tension, low trust, disrespect among people, job-dissatisfaction (Kahn et al., 1964, p. 71) and low effectiveness (Getzels & Guba, 1954, p. 175). Role conflict also shares some of the pre-conditions with role ambiguity. Arguably, various conflicts together can confuse the focal person and lower his or her ability to retrieve sufficient information for his or her role expectations or to predict what his or her behavior will result in. On the other hand, if there is ambiguity in the environment, conflict is more likely to occur. When the environment is both conflicting and ambiguous, it results in highest tension but not significantly greater than that raised by role conflict or role ambiguity solely. (Kahn et al., 1964, p. 89.)

As a conclusion of the above mentioned, the casual linkage between role conflict and role ambiguity can be illustrated in the following figure (Figure 2). Figure 2 is created based on my understanding on the role theory by Kahn et al. (1964) and Rizzo et al. (1970). The figure shows that role conflict is mainly triggered by the violation of chain of command or unit of command and role ambiguity mainly by rapid organizational change. However the two attributions can have an impact on the other role stress as well. Some of the role conflict components contribute to the formation of role ambiguity and one particular type of role ambiguity, namely “role expectations sent in contradictory”, can be seen as role conflict.

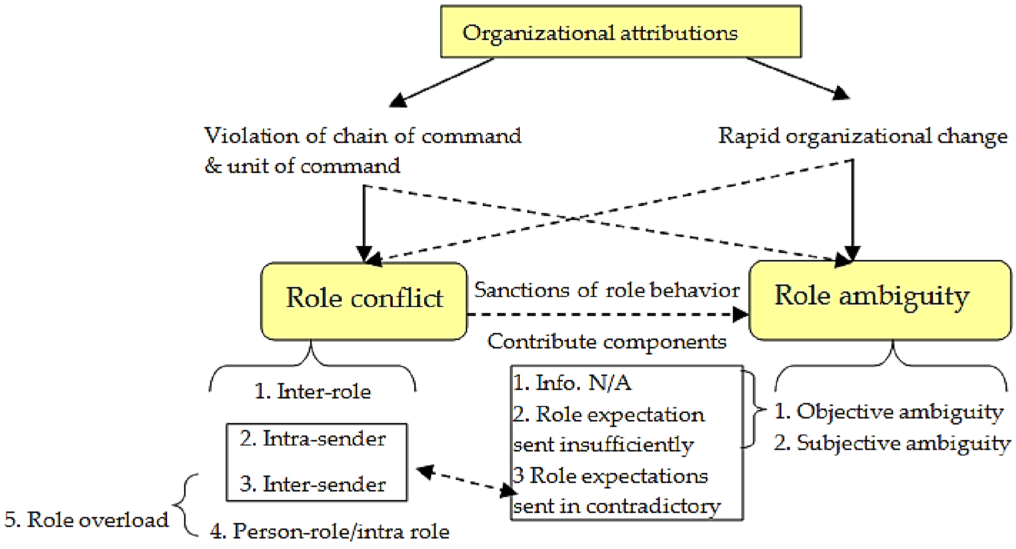

FIGURE 2. Attribution, connection and types of role conflict and role ambiguity. Based on Kahn et al. (1964) and Rizzo et al. (1970)

2.1.4 Clarifying the foci of role ambiguity in this study

There are a considerable number of operational overlaps between role ambiguity and role conflict (King & King, 1990, p. 58). Some researches reported role ambiguity as included in role conflict study (Biddle, 1986, p. 83). Some role ambiguity studies turned out to talk about role conflict (Pearce, 1981, p. 669). A number of meta-analyses have strived to differentiate role ambiguity and role conflict in terms of their variables and moderators (e.g., Fisher & Gitelson, 1983; Jackson & Schuler, 1985; Netemeyer, Johnston & Burton, 1990; King & King, 1990).

Only a few researchers have reached the crux of the problematic role ambiguity and role conflict studies which is the deficiently defined concepts (Pearce, 1981, p. 670; King & King, 1990, p. 60). The critical assessment done by King and King (1990, p. 60) concluded a number of significant variables associated with role conflict and role ambiguity from two major meta-analyses by Fisher and Gitelson (1983, pp. 323 – 324) and Jackson and Schuler (1985, pp. 22 – 25). Such variables are propensity to leave, organizational commitment, job involvement, overall job satisfaction, to name but a few. They pointed out the notable similarities between the mean correlation coefficients of role ambiguity and role conflict within and across the two studies, despite the fact that they are produced by different methods. For instance, the variable, satisfaction with supervisor, has a mean correlation coefficient of -.37 with both role conflict and role ambiguity in Fisher and Gitelson's (1983, pp. 323 – 324) findings, while a score of -.36 with both role conflict and role ambiguity in Jackson and Schuler's (1985, pp. 22 – 25) findings.

The endeavors of these studies have strengthened the finding of the negative influence produced by role ambiguity and role conflict but left the concepts pretty much still ambiguous. King and King (1990, p. 60) argued the obstacles in progressing role ambiguity and role conflict studies were the deficient conceptualization and the lack of multi-dimensionality in their theoretical models. Pearce's study (1981, p. 670) focused on the subjective role ambiguity but addressed only the dimension of "predictability".

This study discusses subjective role ambiguity, namely, how the focal person experiences the uncertainty of role-related information and the unpredictability of his or her own behavior. I chose to leave the objective role ambiguity outside this study not only because it's beyond the scale but also to avoid the conflict with role conflict concept (see Figure 2). Moreover, it is the role incumbent who deals with role ambiguity, and should be provided with theoretical tools.

2.2 Role ambiguity model development

Typically, due to the ambiguity in conceptual constructs, role ambiguity is often discussed together with role conflict in role stress studies (e.g., Kahn et al., 1964; Netemeyer, Johnston & Burton, 1990). The following parts present the development of the role ambiguity model. They endeavor to detach role ambiguity from its combined model with role conflict and clarify its own structure.

2.2.1 Rudimental role ambiguity model

The role episode model by Kahn et al. (1964, pp. 30 – 33) deals with role ambiguity, role conflict and adjusting factors comprehensively. Though the exact mechanism of role ambiguity is not demonstrated explicitly, a general role ambiguity framework can be extracted from this model.

Their study was carried out by means of both quantitative and qualitative methods, a multicast study of 53 selected participants at supervisorial level in six industrial sites and a national survey that covered 725 role incumbents in the United States (Kahn et al., 1964, p. 51).

The authors constructed the measures of role ambiguity against the focal person in terms of three categories, namely ambiguity concerning role expectations, ambiguity concerning evaluations and ambiguity index (Kahn et al., 1964, pp. 415 – 416). Meanwhile, they also developed a 36-item scale to measure the normative expectations held by the role senders (Kahn et al., 1964, pp. 417 – 418).

According to their definition of role ambiguity, the availability of needed information and predictability are two determinants for role ambiguity. In regard to the first determinant, an individual could ask him or herself questions such as: 1) What is the range of his or her responsibilities? 2) How can he or she fulfill them? 3) What are the expectations for him or her? 4) Whose expectations are to meet and what to do with the others'? 4) How is he or she evaluated by others? (Kahn et al., 1964, p. 24; Greenberg & Baron, 2003, p. 124.) As to the second determinant, the individual needs to rely on a certain degree of environment stability in order to anticipate his or her own behavior outcome and what he or she shall not do (Kahn et al., 1964, p. 72).

The authors suggested the following conditions could be the source of role ambiguity on a macro level. Firstly, the increasingly complex organizations' structures, differentiated labor divisions, the number of people involved in planning enlarged the knowledge span that an individual needs to equip him or herself with. Most of the time, it is beyond an individual's comprehensive ability and thus causes the ambiguity. Secondly, the endlessly rapid and constant changes from society have resulted in a flux of organizational structure and human resource which limited people's ability to predict the environment and their behavior. Thirdly, the modern managerial philosophy creates a trend of restriction of information flow which also evidently contributes to the formation of role ambiguity. (Kahn et al., 1964, pp. 75 – 76.)

In the role episode model (see Figure 3) of Kahn et al., the antecedents of role ambiguity and role conflict might be 1) organizational factors such as its size and financial situation, or the focal person's responsibility, rank and so forth; 2) interpersonal relations factors such as the focal person's power, communication style, emotional bonds and dependence with others; as well as 3) personality types such as emotional sensitivity, extroversion-introversion, flexibility-rigidity and needs for achievement.

The focal person can be expected to adjust to role ambiguity in either positive or negative way. The individual's coping behavior for role ambiguity depends largely on his or her personality and interpersonal relationships. How he or she reacts will also in return affect the role senders' behavior on him or her. (Kahn et al., 1964, p. 35.)

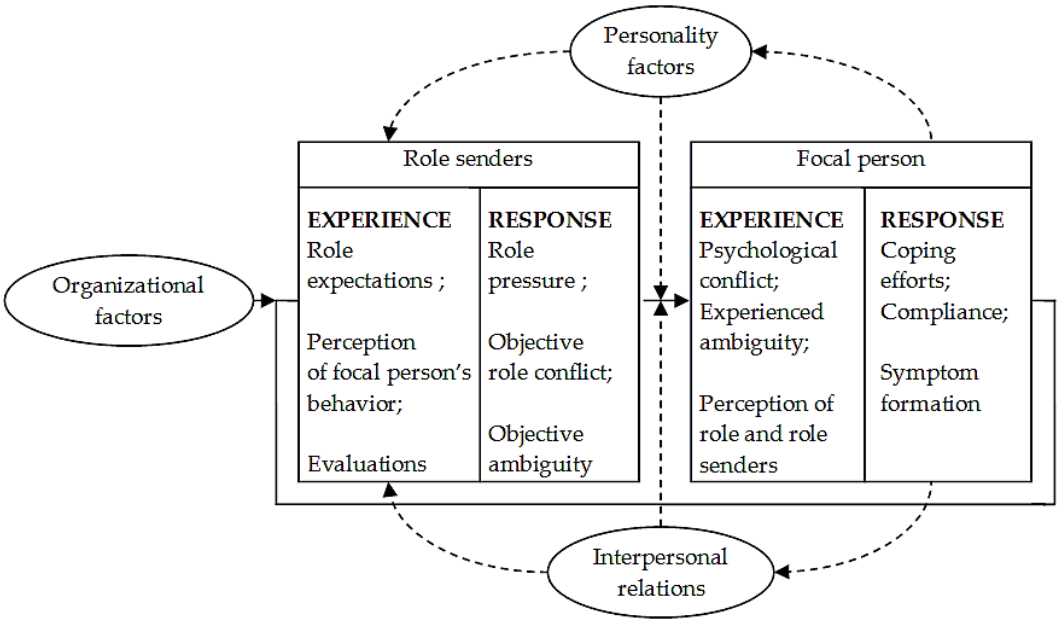

FIGURE 3. Role episode model by Kahn et al. (1964, pp. 26 – 30)

Two types of role ambiguity are presented in the model by Kahn et al. One is task ambiguity which results from inadequate information concerning the job definition, goal and means to implement. The other is socio-emotional ambiguity which manifests an individual's concern of his role behavior in other people's eyes. (Kahn et al., 1964, p. 94.) Both types of ambiguity could increase tension on personal psychological level and decrease trust among the role senders on the interpersonal level. However, task ambiguity is apt to produce job dissatisfaction and the feeling of futility while socio-emotional ambiguity tends to undermine the focal person's interpersonal relationship with his or her role senders and lower self-confidence. (Kahn et al., 1964, pp. 94 – 95.) Kahn et al. (1964, p. 84) also mentioned ambiguity in organizational structure, rules, and regulations, which are suggested to be labeled as dimensions of role ambiguity in later study (King & King, 1990, p. 57).

According to King & King (1990, p. 51) Kahn et al. have contributed greatly to the development of role theory with an extensive role stress framework and laid the foundation to role ambiguity study. However, their finding didn't give much empirical evidence on how subjective ambiguity is subject to objective ambiguity (King & King, 1990, p. 56) or how moderators such as personality affect one's role ambiguity (Levinson, 1965, p. 128). Nor does it consider inter-organizational variables which are considered highly relevant to top level management (Rogers & Molnar, 1976, p. 599). Furthermore, the role stress antecedents of role ambiguity and role conflict were mixed. The major effort was put in favor of role conflict, less discussion was done on role ambiguity. (Pearce, 1981, p. 669.) Generally, inadequate effort was made to differentiate the role ambiguity and role conflict constructs.

2.2.2 Role ambiguity scale by Rizzo, House and Lirtzman

According to Netemeyer, Johnston and Burton (1990, p. 148), the main contribution of Rizzo et al. to the role ambiguity model is that they extended Kahn et al.'s framework and developed a more reliable measurement scale. Their scale was widely adopted in role stress researches and it is still dominant in today's studies (King & King, 1990, p. 56; Bauer & Simmon, 2000, p. 9).

Rizzo et al. (1990, p. 157) conducted their research on 199 members of managerial personnel (sample A) and 91 members of research and engineering personnel (sample B). The extracted items for the role ambiguity scale are listed as follows:

2. I feel certain about how much authority I have.

4. Clear, planned goals and objectives for my job.

10. I know that I have divided my time properly.

12. I know what my responsibilities are.

20. I know exactly what is expected of me.

26. Explanation is clear of what has to be done.

(Rizzo et al., 1970, p. 156. Item numbers are according to the original work)

They also related the role conflict and role ambiguity items with other 45 variables. These antecedents were grouped into such subcategories as "satisfaction, leadership, organization, anxiety, demographics and propensity to leave" (Rizzo et al., 1970, p. 157).

According to their findings, role ambiguity had a higher correlation with satisfaction variables such as personal recognition (reward) and pleasantness (pleasant social environment). They had moderate negative correlation with role ambiguity among both administrative and technical personnel. Autonomy and an intrinsic job (the work itself) had a substantial negative correlation with role ambiguity among technical personnel. (Rizzo et al., 1970, pp. 158 – 161.)

Among the leadership variables, those indicating a close superior-subordinate relationship linked strongly with role measures. For example, the superior's active engagement in "emphasizing production under conditions of uncertainty, providing structure and standards, facilitating teamwork, tolerating freedom, and exerting upward influence" tended to lower the possibility of role ambiguity. (Rizzo et al., 1970, pp. 158 – 161.)

Those organizational conditions that could lower role ambiguity were formalization, adequacy of communication, goal consensus and clarity, coordination of work flow, adequacy of authority, top management receptiveness to ideas and personal development. Violations in chain of command increased role ambiguity among technical personnel, while planning activity and horizontal communication decreased role ambiguity among managerial personnel. Adaptability to change showed more significance in decreasing role conflict than role ambiguity. "Requests for information from superiors" increased role conflict but decreased role ambiguity. (Rizzo et al., 1970, pp. 158 – 161.)

Those variables that belong to demographics were found to have limited correlation with role ambiguity and role conflict. Variables from anxiety and propensity to leave were found to have slight positive association with role ambiguity. (Rizzo et al., 1970, pp. 158 – 161.)

They argued that the results of their factor analysis demonstrated the separation of the two constructs, although by definition role conflict and role ambiguity remained dependent (Rizzo et al., 1970, p. 160). The argument around their scale is that it failed to cover a wider span of role ambiguity representatives. The lacking of socio-emotional ambiguity items and the precision of its items could still be improved (King & King, 1990, pp. 53 – 57).

2.2.3 Top-level management role ambiguity model

Rogers and Molnar's (1976, p. 598) role ambiguity model is based on a research of 102 top administrators in the United States. Their contribution to the role ambiguity model is the development of inter-organizational antecedents. They argued that top level managers were affected differently by role stressors than mid-level managers. Top level managers are expected to be involved in a considerable number of inter-organizational activities which often fall out of their formal authority and therefore increase informal initiatives and role stress. This requires a systematical study from the inter-organizational dimension. (Rogers & Molnar, 1976, pp. 607 – 608.) Nevertheless, they found inter-organizational variables had a bigger influence on role conflict while intra-organizational variables were accountable for role ambiguity (Rogers & Molnar, 1976, p. 598). They also found that educational service organizations are the most likely to embrace role ambiguity among all the types of the organizations they studied (Rogers & Molnar, 1976, p. 603)

The intra-organizational variables introduced were under subcategories such as type or number of organizational programs or services, accountability, autonomy and formalization (Rogers & Molnar, 1976, pp. 599 – 600). Inter-organizational variables they suggested were categorized as the administrators' perception on "the position of their organization in the field relative to others" and "the amount of interaction between their organization and others" (Rogers & Molnar, 1976, p. 601). Formalization, as an intra-organizational variable, was found significantly associated with role ambiguity. The other inter-organizational variables such pressure from outside sources and decision by outsiders were found to increase role ambiguity. This was because these variables often indicated external requests of organizational resources. Behaviors and expectations from outsiders were difficult to predict under this kind of situation. However, when a full regression statistic model including both intra-organizational and inter-organizational variables is used, none of the inter-organizational variables related significantly with role ambiguity. (Rogers & Molnar, 1976, pp. 604 – 607.)

From my viewpoint, this model has broadened the scale of organizational variables. However, the reason why role ambiguity has little association with inter-organizational variables remained unexplained.

2.2.4 Pearce's role ambiguity model

As mentioned earlier, Pearce's model addresses only "unpredictability" as the component of role ambiguity, excluding "experienced informational deficiency" from its original concept.

Pearce (1981, p. 666) examined the antecedents of role ambiguity in previous studies and argued that no notable associations were found between leadership or organizational variables and role ambiguity. The few significant correlated variables could appear by chance since in those earlier studies many variables were measured together (e. g., Rizzo et al., 1970). It could be interpreted that only certain types of organizational structure could have influence on role ambiguity. However, formalization appeared to be the only common variable which is reported to be negatively associated with role ambiguity in most of the studies. (Pearce, 1981, p. 666.)

Concerning the outcomes of role ambiguity, Pearce concluded that stress, anxiety tension, and job dissatisfaction were the most common ones. She argued that the negative consequence such as "low self-confidence" and "sense of futility" reported by Kahn et al. lacked empirical support. She indicated that no conclusion could be drawn between role ambiguity and job performance. (Pearce, 1981, p. 667.)

Figure 4 presents the role ambiguity model by Pearce (1981, p. 671). It assumes any of the four situations, namely "unusual settings or individuals", "changing expectations" from others, those whose performance is evaluated by the "behaviour of others", or "delay or absence of definitive feedback or information", can result in experienced ambiguity. Her model focuses on the type of position where the role incumbent relies largely on others' behaviours to achieve his or her role objects.

The highlight of her model falls on the last two antecedents. She argued that those who work with others needed to know their goals and intentions to shape their behaviour direction. Factors such as the uncertainty of forming a shared goal, uncertainty to predict others' performance and uncertainty of how one's behaviour affects them will lower one's predictability (P1). She also argued that people obtained their job descriptions through informal channels and they needed feedback to produce more favourable behaviours. Delayed feedbacks are inevitably mixed with more up-to-date ones, the focal person may not be clear about which one is linked to which of his or her behaviours thus he or she encounters difficulties to behave more favourably (P2). When the focal person feels the unpredictability of his or her behaviour outcome, he or she has a greater chance to experience stress (P3). However, the magnitude of stress depends on how important the consequence is to the focal person (P4). (Pearce, 1981, p. 672.)

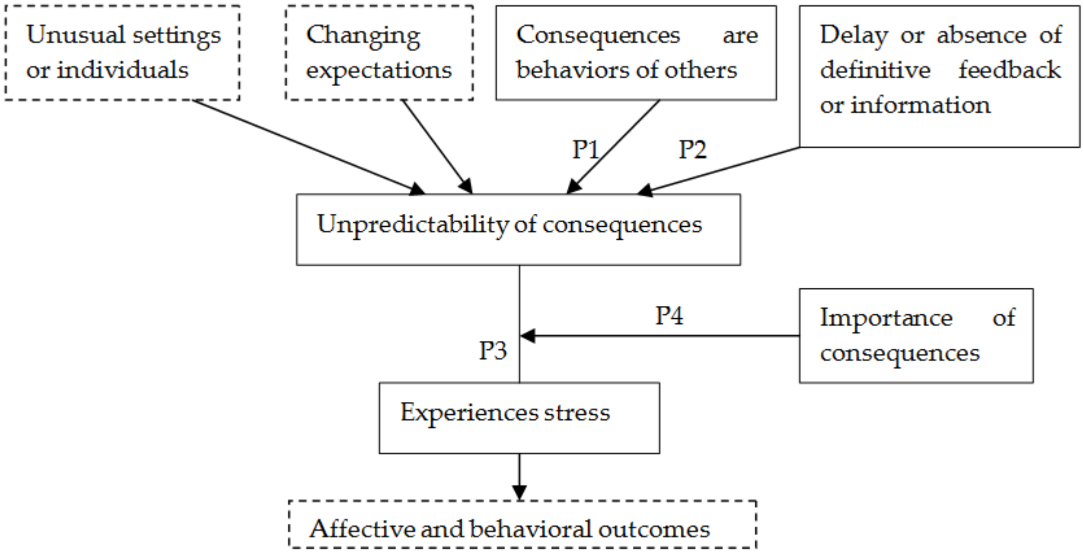

FIGURE 4. A model of role ambiguity by Pearce (1981, p. 671).

In my judgement, Pearce’s model provided a fresh perspective of role ambiguity operation. However, the absence of other organizational antecedents, such as organizational structure and culture, limits its application.

2.2.5 Curvilinear role ambiguity model by Singh

Singh (1998, p. 83) pointed out a curvilinear shape might describe better the relation between role ambiguity and some job variables among sales people. His theory is built upon what has been revealed earlier on the nature of role ambiguity, that ambiguity exists in everyone’s life and it starts to produce dysfunctional effects when it exceeds a certain limit (Kahn et al., 1964, p. 74).

His findings suggested that conventionally low ambiguity was likely to produce high performance, satisfaction and commitment, and lower job tension and turnover intention on the other hand. However, decreasing role ambiguity to a certain level could increase job tension and turnover, especially when the task environment lacks feedback and task variety. This can be explained by the fact that a low ambiguity environment means more details and restrictions. Moreover, increasing autonomy and feedback to some extent is thought to boost the job satisfaction and lower turnover intention. However, increasing this type of job characteristics could worsen the situation in an environment featured by high role ambiguity. This is explained by the effect of overstimulation. (Singh, 1998, p. 83.)

Autonomy, for instance, encourages people to engage more in finding different approaches to achieve the goal. This naturally leads to the need for more information. Autonomy also grants the focal person more decision-making power. However, if there is no adequate information to support, more autonomy only results in more stress. (Singh, 1998, p. 81.) Task variety raises commitment and performance, but it amplifies role ambiguity when it’s over a certain level. Understandably, more feedback at the stage of high role ambiguity is likely to overstimulate the focal person and generate greater pressure. The reason for this is that feedback is not instrumental in reducing stress. He suggested that managers learn to find the balance point and control the job characters at a moderate level. (Singh, 1998, pp. 82 – 84.)

In my view, the finding of this study bordered the understanding of role ambiguity to another level. Nonetheless, it might not be sufficient to describe other professions better than boundary-spanning jobs such as the salespeople.

2.2.6 Mediators (Moderators) and P-E fit model

Very often mediators are used to seek for more evident relationships between role ambiguity and its consequences in modeling. Personal variables (e.g., age, sex, need for role clarity, values, abilities, experience and training), and interpersonal relationship variables (e.g., supportiveness of role senders) are often seen as moderators. (King & King p. 58; Fisher & Gitelson, 1983, p. 330.) Although a number of variables have been trialed, little has been achieved because the results are often mixed and the associations do not have a significant increase after the use of mediators. (Pearce, 1981, p. 668.) Need for achievement (Johnson & Stinson, 1975, p. 332), need for cognition (Kahn et al., 1964, p. 86) and group cohesiveness, for example, are the ones of those mostly applied mediators (Pearce, 1981, p. 666). Thus it is rational to assume that moderators are individually cased and context-bonded (Frone, 1990, pp. 309 – 310). This may also explain why some seemingly highly related variables are reported to have little to do with role ambiguity.

However, person-environment (P-E) fit model tends to solve the puzzle better. This model comes from the transactional perspective of stress formation. This school perceives that stress does not exist in the environment or in the focal person. It emerges when there is a disruption on the homeostasis in the environment-focal person system. (Cooper et al., 2001, pp. 12 – 16.) Based on this understanding, P-E fit model contains two pairs of parameters, which determine the development of the stress episode. One of the first pairs is the focal person's abilities, values and needs, namely the subjective environment. The other is how well the environment responds with its demands and resources, namely the objective environment. Likewise, the other two parameters are the object person, defined as the actual existing person and the subjective person, defined as one's self perception. The discrepancy between the objective and the subjective environment is called contact with reality, while the incongruity between the objective and the subjective person is called accuracy of self-assessment. Therefore a matrix of four type of fitness is created, i.e. objective P-E fit, subjective P-E fit, contact with reality and accuracy of self-assessment. (French, Rodgers, & Cobb, 1974, pp. 316 – 333.)

A person's well-being and mental health is largely subject to the subjective P-E fit. Stress doesn't rise when the individual's ability fails to match the environmental demand. It rises when the individual fails to seek supplies from the environment to meet his or her needs of problem solving. (Edwards, Caplan, & Harrison, 1998, pp. 5 – 7.) The relationship between role ambiguity and the need-supply fit is featured by a U-shape, meaning an exceeding in supply might cause an increase of role ambiguity (Edwards et al., 1998, p. 21).

The P-E fit theory has had a great influence on role conflict and role ambiguity studies. Many researchers have directly or indirectly applied this philosophy in their work, Kahn et al. are considered as one example. The deficiency of this approach could be the difficulty of tracking the misfit process empirically. (Hopps, 1979, pp. 34 – 46; Cooper et al., 2001, pp. 12 – 16; Spielberger & Reheiser, 2005, p. 444.)

2.2.7 Summary—adapted P-E fit role ambiguity model

The above models showcase the important development stages of role ambiguity theory from different perspectives. Kahn et al. (1964) drew the blueprint of role ambiguity. Their successors continue to add construction to it and refine the concept. Rizzo et al.

(1970) developed the role ambiguity scale which is widely adopted in later researches. They confirmed the concept of role ambiguity as two dimensional, namely the lack of information and unpredictability. Rogers and Molnar (1976) found educational institutes the harder-hit area of role ambiguity, namely, being responsible for human tended to create more ambiguity than being responsible for things. Their major effort was put on recognizing organizational variables, though they found inter-organizational variables have very weak connections with role ambiguity among top-level managers. Pearce (1981) suggested the role ambiguity concept should focus solely on “unpredictability” to consolidate the independence of the concept. Singh (1998) demonstrated a curvilinear relation between role ambiguity and its variables.

Overall, role ambiguity is widely explored from the subjective perspective, and is captured by the transactional feature. Namely, role ambiguity doesn’t exist solely in the environment or inside the individual. It’s a transactional process where the individual faces a mismatch between need and supply (Edwards et al., 1998, p. 2; Cooper et al., 2001, p. 17). Based on the above mentioned literature, I explain the mechanism of role ambiguity in Figure 5, and the potential antecedents and consequences in table 2. More details on the variables will be discussed together with the interview data in later chapters.

Figure 5 is the role ambiguity model I developed based on the refined P-E fit theory by Edwards et al. (1998). The height of the cube indicates the role ambiguity level, the length indicates the amount of supply and the width indicates the amount of need. When need is always met by supply (i.e., dash line AC), role ambiguity exists at a minimum level (curvilinear line EF). Since role ambiguity can not be eliminated completely, EF is not falling on AC. The curvilinear line ED’ and EB’ indicate when there is only an increase of need or supply, role ambiguity will increase until it reaches the peak points (D’ and B’). The curvilinear line D’F and B’F indicate the decrease of role ambiguity when the increase of need or supply is satisfied by the increase of supply and need respectively. Thus the three-dimensional surface D’B’EF describes the possible deployment of role ambiguity based on the adjustment of need and supply.

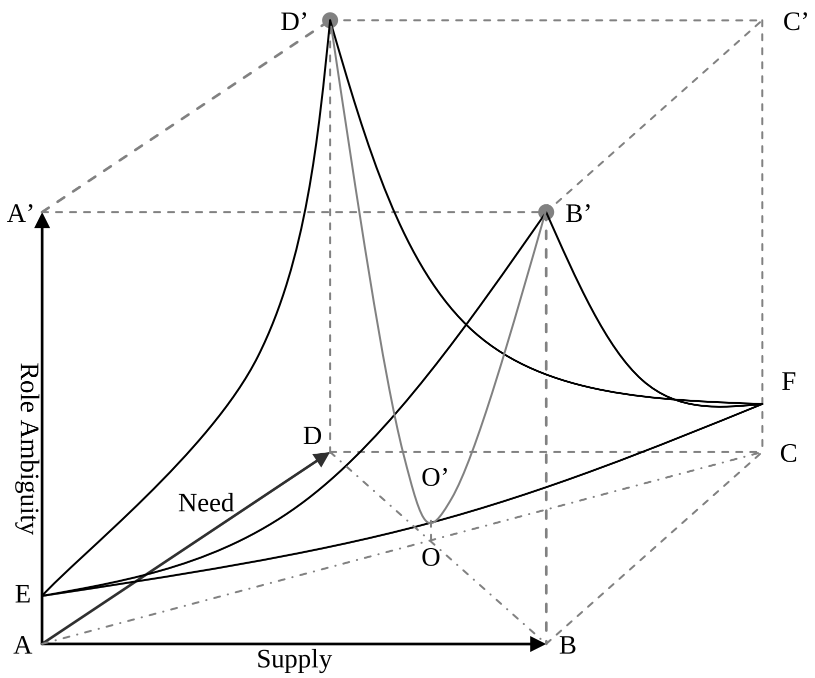

FIGURE 5. Role ambiguity (tentative model, inspired by P-E fit theory in Edwards et al., 1998)

TABLE 1. Potential antecedents and consequences of role ambiguity for administrative personnel

Antecedents	Satisfaction variables	Personal recognition (reward)
		Pleasantness of social environment
		Anatomy
		Intrinsic quality of job (e.g., boundary spanning)
	Leadership variables	Production emphasis
		Structure & standards setting
		Teamwork facilitation
		Tolerance of freedom
		Upward influence
		Consequences are behaviors of others
		Delay or absence of definitive feedback or information
	Organizational variables	Organizational type
		Emphasis on personal development
		Formalization
		Goal consensus and clarity
		Adequacy of communication
		Planning activity
		Coordination of work flow
		Adequacy of authority
		Top management receptiveness to ideas
		Violations in chain of command (accountability)
		Request for information from superiors
consequences	Outcome variables	Anxiety
		Stress (e.g., burnout)
		Job dissatisfaction
		Low performance

Note. The variables are summarized according to the studies by Rizzo et al. (1970, pp. 157 – 161), Pearce (1981, p. 671), Rogers and Molnar, (1976, pp. 603 – 607), Singh (1998, pp. 81 – 84).

3 ROLE-AMBIGUITY AMONG PRINCIPALS

The journey of becoming a principal does not end when one simply moves into the principal's office. In fact, all the endeavors made towards principalship mark only as a beginning and these efforts do not necessarily contribute to principals' professional transformation. The rigorous training and transforming required from this point on is never less than earlier and this process needs to be completed in a short time (Walker & Qian, 2006, p. 297). This chapter introduces principals' roles and working contexts in the Finnish and Chinese public education sectors, followed by the analysis of the role ambiguity phenomenon among principals in the two countries.

3.1 Education in China

The 1978 Reform and Opening policy opened a new era in many areas including education. ("Basic education", n. d.) *The Decision on the Reform of the Educational Structure* released by the Central Committee of the Chinese Communist Party in 1985 called for an improvement in the quality of education. It marked the beginning of education reform in post-Mao era. Since then, Chinese society started to undertake massive social transition to recover from the Cultural Revolution. A number of new phenomena came into education, such as decentralization, quality education, school-based management, curriculum reform, professional development and marketization, all of which are changing the nature of school and its survival strategy. (Walker, Chen & Qian, 2008, p. 412.)

The educational administrative structure is characterized by high hierarchy. The government plays a central role in education with social partners as co-investors. The Ministry of Education (former State Education Commission) is the central administrative body in education under the State Council. It is responsible for implementing law, regulations and guidelines, overall planning and supervising educational activities, including curriculum design, funds management, establishing the qualification and evaluation process, national program coordinating, guiding educational reforms and so forth. Local governments are responsible for the implementation of basic education, while the state and provincial governments are in charge of higher education. Industry, business or other social organizations play an increasingly important role in adult and vocational education. (Feng, 2003, p. 207; “Education Management ,” n. d.; Functions, n. d.; “Basic education”, n. d.)

The lopsided economy development between the east and the west of China is well known. As a matter of fact, the gap in educational development between the two parts is even more severe than the economy status quo. (Yuan, 2005, p. 5.) Policies and reforms have been carried out to even the unequally deployed resources.

3.1.1 Schooling system

The Nine-Year Compulsory Education [NYCE] (from age seven to 15) is required by *The Compulsory Education Law of the People’s Republic of China* promulgated in 1986. NYCE was declared as achieved nation-wide in 2002. Developed areas such as the coastal regions have launched the universalization of upper secondary school education (“Basic education”, n. d.) The education system is composed of pre-school, primary education, secondary education and higher education. (see Appendix 1). After NYCE, students need to sit in the entrance exams organized by the local governments to get admission to higher secondary school education.

China is a country featured by great diversity and imbalance in terms of its development process. Understandably, different text books were developed by the local governments, experts and teachers. The State Textbooks examination and Approval Committee evaluate the content and grant the publication right for the local text books. (“Basic education”, n. d.)

Test-oriented education has deep roots in China’s education system. As is revealed by its name, it serves one single purpose, to gain good examination results. The mechanical learning and teaching book knowledge has long received criticism from the society. (Dello-Iacovo, 2009, pp. 241 – 242.) Accordingly, schools were designated as “key” or “non-key” schools. “Key schools” naturally gained more resources and the “non-keys” went into a vicious cycle. At the price of equality, this practice was able to quickly identify and promote the most promising candidates to feed the nation’s hunger for talents during its construction period. (“Harmful ‘key school’”, 2006.)

Around the 1990s, the concept of quality education (Su Zhi Jiao Yu) emerged as the core guidance for education policy, with the attempt to develop students on an overall scale and ease their workload. A corresponding curriculum reform for compulsory education was launched in the late 1990s to pave the way for modern teaching and assessment methods, as well to allow students’ creativity and practical skills to be fully developed with less emphasis on the homework load. (Dello-Iacovo, 2009, pp. 242 – 244.)

This reform has brought anxiety to school principals as it seems to have lowered their students’ performance in the university entrance exam which is still the “baton of education”. Moreover, the content of the examinations generally remains in line with the test-oriented education. A survey of 390 principals from primary and secondary schools in Hebei province showed the contradictory attitudes towards quality education: most of them supported the idea but a great number of them were not able to put it in action (Dello-Iacovo, 2009, pp. 247 – 249.)

Around the mid-1990s, The Ministry of Education required to stop the “key school” practice. It received few responses because of the legacy of the test-oriented education. The 2006 revised *The Compulsory Education Law of the People’s Republic of China* made the practice of “key school” labeling a legal taboo. (“Harmful ‘key school’”, 2006.) However, this system has transformed into another similar form of school classification, the exemplary schools system, but under a quality-education regime. (Walker et al., 2008, pp. 412 – 413.)

Schools receive funding from their direct providers. For example, state controlled schools get funding from the state, while the funding for schools operated by private sectors is raised by the sponsors. (“Education Management ,” n. d.) After the introduction of free market to educational sectors, schools started to face resource constraints. As a result, they have to find their ways to fundraising. Typically, extra funding may come from school facility renting, tuition fees or extra fees charged for students who don’t meet the enrollment criteria. Schools compete with each other for higher ranking so as to attract better resources. (Walker et al., 2008, pp. 412 – 413.)

3.1.2 Principal demographics

The first census in the education sector since the foundation of the People’s Republic of China was completed in 2009. Statistics show that, during the time, the population of primary and secondary school principals is 535,725, among which 87.34% are male. The average age of the principals is 43.2. The majority of them are between 41 and 45 years of age. 35.92% of the principals hold at least a Bachelor’s degree, 47% hold a college diploma, 17% of them have high school level or secondary vocational school level education, and 0.22% of them have junior secondary school or even a lower level of education. The results also show the unbalanced professional development among principals between the east and the west, the rural area and the cities. (“First educational census”, 2009.)

To ensure the stability of the principal team, the position used to be considered a life long tenure (State Education Commission, 1992). Within a decade, the tenure system is gradually introduced to primary and secondary schools in the country. A principal normally has a term of three to five years. He or she can continue to serve for another term of office depending on his or her performance. (Ministry of Personnel & Ministry of Education, 2003.)

In Shanghai, a ranking system of principals was introduced. It contains five grades, (special-, first-, second-, third- and fourth-classes) and twelve levels, to which principal’s salary is linked. Principals apply for the level themselves and are evaluated by a special evaluation committee. (Feng, 2003, p. 212.)

3.1.3 Principal recruitment

The Decision of the Reform of Education System of the Central Committee of the Communist Party of China (1992) provided the principal recruitment procedure as follows. Firstly, the candidate is proposed based on democratic procedures carried out by the educational administrative department and the personnel department according to local needs. Thereafter, the candidate is assessed according to people’s opinions. Then the candidate is examined and endorsed in accordance with the local provision.

The Opinion on deepening the reform of personnel system in primary and secondary schools issued by the Ministry of Personnel and the Ministry of Education in 2003 called for a more democratic and competitive principal appointment system. It means the recruitment should be more open to the whole society. Stricter examinations are applied and the best is selected through fair procedures.

The 2006 revised Compulsory Education Law emphasized that the principal responsibility system should be implemented in schools. Principals should be recruited by educational authorities at the provincial level. During the implementation process, local authorities started to standardize the local regulations so that the responsibility of administrating principals belongs to the bureau of education. (Huang, 2010, p. 18.) In practice, under the centralized regulation and control from the government and Chinese Communist Party, relatively limited autonomy is delegated to local authorities or principals (Yang, 2006, p. 72).

3.1.4 Principal qualification

Principal candidates must fulfill the requirements from the following three areas. First of all, they must be loyal to the Chinese Communist Party, devote themselves to education, care for their students, obey and implement educational laws and regulations, have managerial and leadership competence. Secondly, principals for township primary schools should hold an education level above secondary normal school, principals for lower secondary schools should have at least junior college level education, high school principals should have education no lower than the level of a Bachelor’s degree. (State Education Commission, 1991.) Moreover, principals should have at least five years of working experience in education. They are qualified teachers and are classified as at least mid-class teachers. (Ministry of Personnel & Ministry of Education, 2003.) Principals are required to obtain the principal qualification certificate before they enter office. For resuming principalship, they must renew their certificate through training every five years (Ministry of Education, 1999). Last but not least, principals should have good physical and mental health (Ministry of Personnel & Ministry of Education, 2003).

3.1.5 Principal training

Educational administration departments in State Council take charge of the overall planning, operating, evaluating and guiding of principal training programs. Local governments are accountable for principal training at basic education sectors. The training is financed by government mainly, but not restricted to other sources. The training content contains political theory, ethics, educational policy, educational theories and practices, modern techniques and other knowledge in social science. The participation in principal training is considered an important aspect during the supervision process. Awards and rewards are given to the outstanding training organizers and participants by the government. (MoE, 1999.)

The first principal training program was established in 1955 by the Ministry of Education for principals working in basic education sectors. The aim was mainly to strengthen principals' political loyalty to the Communist Party of China. The principal training entered a new era in 1979 with a clear emphasis on professional development. In the late 1990s, the training program was renewed with more diversity. Contemporary principal training includes induction (min. 300h), continuing (min. 240h) and research training. Research training is to invite excellent principals to study certain topics. The local governments can evaluate the effectiveness of the training program. Potential young principals are sent by local government to pursue a Master's degree in Educational Administration. Universities' involvement started to be promoted. East China Normal University, for instance, established the National Training Center for High School Principals in Shanghai in 1990. Selected professors were appointed by the Shanghai Municipal Education Commission to steer the training program. (Feng, 2003, pp. 206 – 211.)

Currently, some major problems are hindering the efficacy of principal training. Firstly, many principals are not motivated to participate in training as it doesn't have a significant influence on their salary increase and they are too busy to take it seriously. Therefore training usually takes place part-time. Secondly, trainings emphasize too much book knowledge instead of administrative and leadership practice. Thirdly, geographical variation between training programs is large. Rural areas do not have sufficient and qualified training programs. (Feng, 2003, p. 211).

3.1.6 Principal evaluation

Principal evaluation started late in China and it hasn't yet formed a systematic evaluation scheme. Currently, examinations remain as the main form of principal evaluation. There are two types of examinations. One is the annual examination and the other takes place before principals ends their term of office. (Yang, 2005, pp. 20 – 21.) Principals are evaluated upon four aspects: ethics, competence, diligence and performance. The details of the criteria and methods are decided by the local authorities according to the local practical situation. Apart from principals' daily work, the operation of the school is also assessed on a frequent basis. (State Education Commission, 1992.)

The purpose of the evaluation has been mainly to decide whether to promote, reward or to demote, discipline principals. Yang (2005, pp. 20 – 21) pointed out the other functions of the evaluation, namely to improve principals' work and to help their professional development, have been overlooked. She also criticized the lack of the evolvement of researchers, students and parents in the evaluation process apart from the educational authorities.

3.2 Education in Finland

In 1917 Finland gained its independence, which marks the launch of building a school system. In 1921, compulsory education was confirmed by law. (Linnakylä, 2004, p. 151.) The long-term reform on education started in the early 1960s (Aho, Pitkänen, & Sahlberg, 2006, p. 115). The 1970s were characterized by centralization and the establishment of comprehensive education. The rise of decentralization was witnessed in the 1980s. (Linnakylä, 2004, pp. 187 – 190.)

In the past 50 years, Finland has undergone great economic and educational changes. The change process was accelerated even more in the 1990s when Finland was hit by the recession. In the end, the country not only survived the drastic changes but transformed into one of the most powerful entities in economy and education. (Hargreaves, Halász, & Pont, 2007, p. 11.) Today, education is still highly valued and respected by the whole society in Finland, and the ideology of sustainability is soaked into leadership in education (Aho et al., 2006, p. 116, p. 135).

Both teachers and principals are highly respected in Finnish society (MoE, 2007, pp. 16 – 17). Life-long learning is the mainstream culture, instead of test-oriented education (Linnakylä, 2004, p. 156; Hargreaves et al., 2007, p. 16). Pragmatism, quality, equality, decentralization and trust are the key words to cap the Finnish education system and its success (Linnakylä, 2004, p. 200; Värri & Alava, 2005, p. 5; Aho et al., 2006, pp. 117 – 119; MoE, 2007, p. 14; Hargreaves et al., 2007, p. 17).

3.2.1 Schooling system

The Ministry of Education and Culture (previously the Ministry of Education) is in charge of financing as well as legislating and policy making. The National Board of Education steers the national curriculum, develops the evaluation system and provides professional support. Municipalities have strong executive power under the Ministry of Education and Culture. (Aho et al., 2006, p. 103, p. 118; MoE, 2007, p. 19.) (See Appendix 3)

There are 336 municipalities nationally (Kunnat, 2012), most of which are small (Hargreaves et al., 2007, p. 19). Municipalities are the local schooling providers. Most of them have their own Educational Committee that takes charge of the curriculum building and implementation, the allocating of resources, the employment (including selection, evaluation, professional development, promotion, dismissal, and redundancy) of teachers and principals, the intake planning of students at the basic education level (Aho et al., 2006, p. 103; MoE, 2007, pp. 21 – 24; Hargreaves et al., 2007, p. 19).

One national curriculum framework guides the whole country (Ministry of Education, 2007, p. 25), however, local municipalities, schools and teachers are given great autonomy to determine what and how to educate according to the local needs (Linnakylä, 2004, p. 163; Aho et al., 2006, p. 110; Hargreaves et al., 2007, p. 19).

Municipalities own most of the local institutions (Aho et al., 2006, p 103). Public schools are co-funded by the state and the municipalities, who also support private educational sectors with considerable funding (MoE, 2007, p. 12). The whole amount of educational expenditure varies regionally but two-thirds of the sum goes to teaching in compulsory education (Linnakylä, 2004, p. 157).

The Finnish school system has a very similar structure to the Chinese system (see Appendix 2). Finnish schools are known for their homogeneity and high quality

(Värri & Alava, 2005, p. 6). Enrollment at the stage of compulsory education (age seven to sixteen) is arranged by local municipalities, which is not affected by the social and economic status of the family. Generally speaking, Finnish students enjoy their basic education lightheartedly, after which they face a fierce competition of enrolling in upper secondary schools or vocational institutions. Educational services are individually tailored for students. Classes are heterogeneous as students are not placed according to their performance. This naturally brings the need for highly educated and qualified teachers, which means in practice a Master's degree for each one of them. (Linnakylä, 2004, pp. 158 – 178.) With the help of a well-built school network, one can hardly expect any difference between schools and regions in terms of educational performance (Linnakylä, 2004, p. 197, p. 212) nor ranking or competition (Hargreaves et al., 2007, p. 20.)

3.2.2 Principal demographics

The principal's position is a life-long tenure in Finland. However more than 60 percent of upper secondary school principals are over the middle age which means passing tacit knowledge onto the next generation principals will be a major concern in the near future. Practically, senior principals are encouraged to work longer. The principal demission rate is low. Mostly they leave for a higher position in the municipal administration. (MoE, 2007, p. 20, pp. 34 – 37; Hargreaves et al., 2007, p. 23).

Principals are paid according to the form of the educational institution they serve. Local authorities have the power to detail the salary sliding scale based on a salary system. (MoE, 2007, p. 36.) In most cases, they are earning a decent salary which is higher than that of the teachers (Linnakylä, 2004, p. 197 & p. 171). However, the salary is not considered to be the main drive for principals as it is not significantly higher than that of the teachers and it doesn't match their overloaded workload (Hargreaves et al., 2007, p. 23).

3.2.3 Principal recruitment

During the 1950s, the position of a school principal was not very much desired. Teachers were basically assigned the managing tasks (Isosomppi, 1996, pp. 94 – 95, as cited in Värri & Alava, 2005, p. 6). Nowadays, principal recruitment still remains a challenging task and the principal population is decreasing due to the closing down of schools or administrative mergers (MoE, 2007, p. 17, p. 33).

Concrete recruiting procedures and criteria depend largely on the practice of the local governance and each case is unique (MoE, 2007, p. 23, p. 34; Hargreaves et al., 2007, p. 19). The recruitment is open to the public and normally consists of interviews and psychological tests. The final decision is made by the local education providers. Teaching experience is firstly considered (Aho et al., 2006, p. 119; Kanervio & Risku, 2009, pp. 94 – 95, as cited in Risku & Kanervio, 2011, p. 171.) However, some tendency appears to favor leading skills and to employ more young and talented principals with the belief that personal competence will outdo the experience (Aho et al., 2006, p. 135; MoE, 2007, p. 34).

3.2.4 Principal qualification

Basically, principal candidates must be first of all experienced teachers to pursue principalship (Hargreaves et al., 2007, p. 23), which means they have at least a Master's degree and they are qualified to teach in the school where they apply for principalship. Additionally, according to the legislation in 1999, principals must obtain the educational administration certificate standardized by the National Board of Education, which is normally linked to a 12-ECTS-credit program, or participate in preparation programs which contain at least 25 ECTS credits, or prove sufficient educational administration experience. (Värri & Alava, 2005, p. 7; MoE, 2007, pp. 38 – 40.)

The certificate can be obtained by passing an exam where knowledge on public law, administrational procedures, personnel administration, finances and educational administration is tested. One can also choose to replace part of the exam with written assignments. The exam is graded as either fail or pass by some administrational civil servants from the National Board of Education. (Värri & Alava, 2005, p. 12.)

The 25 ECTS credits training program is usually organized by universities. The first program of this kind in Finland was established by the University of Jyväskylä in 1996 and is available nowadays in Jyväskylä and Helsinki on a yearly basis. Universities in Joensuu, Lapland, Oulu, Tampere and Vaasa also run principal training programs from time to time. The organizing universities have autonomy in content and study module design. The learning points basically cover administration knowledge and leadership skills. The studies are usually part-time and last about one and a half years.

(Värri & Alava, 2005, p. 9; MoE, 2007, pp. 40 – 46). The entry of the university-level preparation programs is constrained by its cost or the intake quota. Either way, the selected participants are highly motivated. (Värri & Alava, 2005, p. 11.)

Exceptions are made to some candidates, for example, educational department directors. They are exempted from the requirement of teaching experience because of their strong educational administrative profiles. For vocational institutions, the requirement for school leaders can be more diverse. For instance, a suitable degree gained in polytechnics and sufficient educational administrative qualification could also be accepted. (MoE, 2007, pp. 39 – 40.)

3.2.5 Principal training

Apart from the pre-service training mentioned above, there are also continuing professional trainings such as induction training, mentoring and so forth. Training providers vary from the National Board of Education's National Centre for Professional Development in Education (January 1st, 2010 renamed as Educode), to universities or training companies. The training programs are evaluated within the providers' own evaluation framework.

Some training provided by the state and municipalities is free. (MoE, 2007, pp. 41 – 46.) External training from universities is popular among principals. Big municipalities purchase training services from universities but the small ones in rural areas do not enjoy such convenience (Hargreaves et al., 2007, p. 24). The state provides guidance in financial, personnel management, curriculum and strategic planning in training new principals. Experienced principals can select from the many training modules according to their own needs. (MoE, 2007, pp. 45 – 46.) Specialist Qualification in Management programs, Professional Development programs or advanced studies at the universities are, for example, suitable training modules for them (Värri & Alava, 2005, p. 12).

Take the University of Jyväskylä for example, they offer advanced studies in e.g., "leadership in educational organisations; educational administration – evaluation and renewal; interpersonal communication; organisational learning and learning systems; organisational culture, values, and ethics at schools; methodology and practicum". The curriculum is more theoretical than that of the principal preparation program, as it was meant to help principals forge their own leadership philosophy. (Värri & Alava, 2005, p. 14.)

It is argued that the principal training focuses more on the management area than leadership. Continuous training is not mandatory and principals are encouraged to seek for suitable trainings by themselves. The actual participation rate varies between individuals. (MoE, 2007, pp. 30 – 46.)

3.2.6 Principal evaluation

A new evaluation system featured by self-evaluation was adopted in the 1990s based on the belief that knowing one's own situation well is the key to external challenges (Linnakylä, 2004, p. 190). Self-evaluation is built on the knowledge of "common values, visions, one's own resources, awareness of expectations and requirements of external interest groups". Training is followed as a solution in the case of negative feedback (Hargreaves et al., 2007, p. 21). Typically most education providers have their own evaluation tools. No external tool is sought to measure a principal. (MoE, 2007, pp. 25 – 31). Self-evaluation is, though, criticized for not providing reliable data. (Linnakylä, 2004, p. 191.)

3.3 Overview of principals' roles

The increasing reforms and culture diversity, changing leadership philosophy, principal selection and preparation have characterized the environment of principalship in western countries. In the east, these elements are as well found but in rather different cultural settings. (Walker & Qian, 2006, p. 298.) These changes force principals to embrace new perspectives, competencies and attitudes (Chapman, 2005, p. 8). The following parts provide an overview of the principalship shifts and the general roles principals undertake.

Earlier, a principal's role didn't differ very much from that of a teacher. The principal was addressed as a head teacher whose tasks were mainly to teach and guide junior teachers. In the early twentieth century, Taylorism inspired head teachers to undertake more management and administrative tasks as schools grew bigger and their organizational structure became more complex (Wang, 1993, p. 8; Hill, 2002, p. 43;

Madden, 2008, p. 21). Educational reforms in the 1980s and 1990s brought more operational power for principals under a centralized curriculum development system. In practice it encouraged principals to think and behave like business leaders. (Hill, 2002, pp. 43 – 75; Renihan, Phillips & Raham, 2006, p. 14.) The last three decades witnessed the drastic change in principals' roles alongside the societal changes. Global economy reconstructed our society and this process demands principals to fully transform into managerial and leadership roles which will distinguish them further from teachers. (Hill, 2002, pp. 43 – 45; Renihan et al., 2006, p. 11.) Principals are held accountable for students' achievement, pedagogical researches and pilot projects to ensure the future success in global economy (Renihan et al., 2006, p. 14).

In short, the shifting of principalship is happening globally, driven by decentralization and economy-orientation (Chapman, 2005, p. 7). Generally speaking, the roles of today's principals can be concluded into the following dimensions.

3.3.1 Pedagogical leader

Traditionally principals are always viewed as experts above all in teaching and learning. They are first and foremost pedagogical leaders. (Hill, 2002, p. 43.) This came from the tradition that the principal's role is almost always assumed by a teacher (Madden, 2008, p.21). Principals are responsible for the quality and effectiveness of education they offered to their students. Many researches have confirmed the great impact a principal can make on students' achievement (Renihan et al., 2006, p. 15; Fullan, 2002, p. 17). To achieve quality learning results from students, principals are held accountable for enhancing teachers' skills, developing professional communities (Fullan, 2002, p. 16). They are expected to possess profound knowledge in curriculum development, establishing standards and assessment, assigning tasks to teachers, identifying less efficient teachers and creating professional improvement opportunities for them (Renihan et al., 2006, p. 18). As one might argue that principals' influence on students' learning is mainly through teachers, they are nevertheless educating students by their pedagogical charisma (Wang, 1993, pp. 47 – 48).

3.3.2 Manager

Manager is another basic role for principals. Like all the other organizations, principals need to plan the goals and objects for their schools, organize financial and human recourses efficiently, direct activities and control the goal-achieving process through evaluation systems. (Sergiovanni, 2006, p. 4; Renihan et al., 2006, p. 15). In practice these managerial tasks can be strategic planning, making school policies, public relations management, daily operations, budgeting, information systems management, entrepreneurship and so forth (Renihan et al., 2006, p. 20; Madden, 2008, p. 21). To summarize, principals' managerial role is to arrange all the possible resources to serve pedagogical targets (Renihan et al., 2006, p. 21).

3.3.3 Transformational leader

Today being the top professionals in the field of pedagogy and administration is simply not enough for principals to survive in a high-paced changing environment. Principals are called to become transformational leaders to meet the further needs. (Fullan, 2002, p. 17.) This role requires principals to be role models in proactively adapting to and creating changes. Their key task is to transform school culture so that it leads to profound and long lasting changes. On one hand, they must share the responsibility of creating a supportive learning community where everybody is engaged in a more profound learning process and valuing contributions from different people. On the other hand, principals need to be brave, enthusiastic and optimistic change agents. They need to design and set realistic goals for school and to engage and inspire people in transforming school culture. (Flockton, 2001, pp. 17 – 30; Fullan, 2002, p. 17).

3.3.4 Sustainable leader

As leaders of learning organizations, principals see themselves in a bigger picture—leaders of learning communities (Hargreaves et al., 2007, p. 7). A new trend of principalship is to lead sustainably so that the school system is able to improve by itself and have a positive impact on the society in the long run. In order to be change agents, principals must think morally and systematically of their responsibilities and involve themselves in developing a good social atmosphere. They need to understand their school can not succeed alone within an unhealthy environment. They are expected to lead beyond their schools, namely, to be system leaders. Therefore, principals are responsible for narrowing the gap between the high performing students/schools and low performing ones, leveraging the development of the whole community. They are also required to learn in their contexts, which is believed to increase knowledge creating and sharing. (Fullan, 2002, p. 17; Hargreaves et al., 2007, p. 4 & p. 10.)

Despite the space-wise aspect of sustainable leadership, another time-wise task for principals is to nurture future leaders at all levels, especially the development of teachers. (Fullan, 2002, p. 19; Hargreaves, Halász, Pont, 2007, p. 8.) Last but not least, they have the responsibility to tackle the social ill and maintain social justice (Madden, 2008, pp. 23 – 24).

These above-mentioned role dimensions can be understood as the advancing of principals' responsibility scale and level. Arguably, principals are supposed to shape their role according to the local and current needs (Fullan, 2001, pp. 19 – 21). However, in general, the percentage of how much each role plays in principals' real work life has been largely distorted. Although a pedagogical leader was and still is admitted as the primary role, principals must perform well, the attention on this role was transferred drastically to other managerial functions resulting from rapid social change. (Renihan et al., 2006, pp. 14 – 16).

The management of principals' roles has not always been taken care of by sufficient training, which in return affects principals' recruitment, retention, and development (Chapman, 2005, p. 8).

3.3.5 Principals' roles in China

The principalship in China has a long history dating back from Xia Dynasty (ca. 2070 B.C.) where schools already took shape. Those schools were meant for the royal family and the aristocrats. Both one administrator and one high official were assigned by the emperor to take charge of the operation. Confucius (ca. 551 – 479 B.C.) initiated private schooling and therefore made education available to those who were not entitled to governmental organized education. However, secondary school education didn't take its form until Qing Dynasty (ca. 1880s). The person who took the principalship was called "general administrator" (Zong Li) and later "supervisor" (Jian Du) during that time. Since the beginning of the Republic of China (ca. 1912) the title was finalized as "principal" (Xiao Zhang) and it is used until now. (Wang, 1993, pp. 9 – 10.) From the foundation of the People's Republic of China (1949) till the 1960s, principals were expected to be government cadres rather than professional personnel. It was not until the 1980s that the expectation became the other way round. (Feng, 2003, p. 215).

In general, the hierarchy in secondary schools ranges from principal to the Party secretary, vice principal, dean of studies, chief of pedagogy and research, the League secretary, head of the grade, class teacher and subject teacher (Wang, 1993, p. 45). The concept of the principal responsibility system can find its rudiment as the school council system already in the beginning of the People's Republic of China. It was rejected in 1957 and its authority was handed over to the CPC Branch established in each school. (Zhu & Ruan, 2008, pp. 176 – 177.) A Party Secretary was embedded in the school management board as a representative of the will and doctrine of the Communist Party of China. It was not until the promulgation of *The Guideline for the Reform and Development of Education in China* was issued by the CPC Central Committee and the State Council in 1993 that the principal responsibility system officially took over. Nowadays principals are gaining more power and become the key leaders within the schools. (Walker et al., 2008, p. 413; Zhu & Ruan, 2008, p. 178.)

According to *The Prerequisites and Requirements for the Principal Position* issued by the State Education Commission of China which came into effect in 1991, Wang (1993) has concluded the many facets of principals' responsibilities into the following roles.

Firstly, principals are administrators. They are fully responsible for administration tasks in school. They are required to follow and implement education strategy and the instructions conveyed by the CPC and the state. Their detailed responsibilities include organizing teaching activity, ideological and political education; taking care of the physical and hygienic condition, the health of teachers and students; they also need to interact with their subordinates to fulfill the tasks. (Wang, 1993, pp. 45 – 46.)

Secondly, principals are community organizers. They set the goals and strategies based on the internal and external condition of their schools. They need to design a scientific management system so that the resources are utilized appropriately. They coordinate the relationship between stakeholders, harmonize interpersonal relationships, create a sound environment, optimize school culture and raise teachers' spontaneousness to achieve the common goal. (Wang, 1993, pp. 46 – 47.)

Thirdly, principals are legal representatives of their school. They execute their power on behalf of their schools. They need to protect the legal rights of their teachers and students. (Wang, 1993, p. 47.)

Last but not least, principals are socialist educationists. Principals need to set themselves as the learning and teaching role models for their teachers and students as well as to guide teaching and learning activities. Apart from being educationists, they should also be enthusiastic about socialistic education and devote themselves fully to this career. To summarize, a Chinese principal is supposed to be the combination of a leader, an administrator and an educationist. (Wang, 1993, p. 48.)

Compared to the earlier mentioned principal's role overview, the roles as a pedagogical leader and a manager are analogous to the roles as an educationist and an administrator in the Chinese settings. The role as a community leader is located between a transformational leader and a manager. The sustainable leadership role is not yet strongly pronounced. In reality, those roles from the regulations are interpreted as a teachers' teacher, an educational expert, a scholarly leader, a school manager, a decision maker, a fundraiser, an ideological and political tutor, a legal representative, a police of social justice, and a public relations officer. Basically, they are expected to be omnipotent, which is seldom an option. (see Tang, 1996, p. 23; Wang, 2003, p. 39; Zhu & Ruan, 2008, pp. 214 – 216.)

3.3.6 Principals' roles in Finland

The roles of Finnish principals consist of actions that ensure the fulfillment of the objectives set for the schools by the society (Juusenaho, 2004). The scale of the roles of the Finnish principals is large and enjoys great local diversity (MoE, 2007, p. 25). It reflects in general all the dimensions mentioned before. The official status of principals was not stipulated in legislation for the education providers until the comprehensive school system reform in the 1970s. The principal's position was further strengthened in legislation in the 1990s. (Taipale 2000, pp. 21 – 27, as cited in Värri & Alava, 2005, p. 6.)

According to the national legislation, principals are generally responsible for their schools' operation as well as the students' assessment. They are independent in school-related decision making. However, their actual authority varies according to the local situation. (MoE, 2007, p. 18.) For example, in some cases the principal and the superintendent remain as one role, or a principal also works in the local municipality (Risku & Kanervio, 2011, p. 171), or there can be one administrative principal of the local education consortium established jointly by municipalities, leaving pedagogy and other operational tasks to the other principals in the region (MoE, 2007, p. 25). In small municipalities, a principal can be the same person as the director of culture services and sports services. (MoE, 2007, p. 18.) In small schools, principals’ responsibilities include all the trifles while in big schools principals delegate them to their colleagues (Hargreaves et al., 2007, p. 22). Normally principals are supported by vice principals, teachers, school secretaries, janitors or students in school operation. Whether there is a vice principal in the school or not also modifies the principal’s roles. (MoE, 2007, p. 27.)

As pedagogical experts, Finnish principals are required to take care of the well-being of students and to teach two or three hours, up to 20 lessons, a week. This makes principals’ pedagogical leading down to earth and connects them closer to their students. (Hargreaves et al., 2007, pp. 17 – 21.) Principals do not necessarily need to observe teachers’ work in class (MoE, 2007, p. 31). Värri and Alava (2005, p. 7.) pointed out that during the last two decades principals have had more say in the local school policy making process. “While the field of school leadership is becoming more complex, principal’s strategic leadership roles are increasing and the principal’s own role as an educator has decreased.” (Värri & Alava, 2005, p. 7.)

Since 1990, the role as a manager has been raised as the second basic role for Finnish school principals. From the managerial perspective, principals should behave like business managers. They need to allocate the budget provided by local authorities, understand and execute local policies, participate in staff recruitment and human resources management, set the annual plan according to the curriculum, manage teamwork, meet parents’ demand and follow the results. (Aho et al., 2006, p. 119; Hargreaves et al., 2007, p. 22; MoE, 2007, pp. 20 – 26.) It is reported that principals’ energy is directed largely to some other areas, bureaucratic work for instance, instead of developing the teaching and learning quality (Karikoski, 2009).

Nested in a decentralized political structure, principals’ leadership is required to be more than just good enough for their own schools, but also for their communities. A concept of “system improvement” has been emphasized in education recently. It means a joint effort from all stakeholders to leverage the whole learning community. What this means for principals is that they are not working merely for the sake of the performance of their schools; instead, they are accountable for the educational development of the whole district. (Hargreaves et al., 2007, pp. 3 – 8.) For example, the principals’ role of establishing adult education in upper secondary schools has become vital. Inter-school cooperation is regarded crucial in system improvement. For example, collaboration between vocational institutes and upper-secondary schools is on the rise. Networking is very common and principals often ask the other principals for help or just to share resources. Internally, the leadership burden is not meant for only principals but is shared with teachers, parents and students, so that the schools are prepared for self-development in the long run. (MoE, 2007, pp. 28 – 29; Hargreaves et al., 2007, pp. 3 – 8, p. 21 – 30; Mäkelä, 2007; Pesonen, 2009.)

Though Finnish principals enjoy high autonomy, their roles are in fact designated by local authorities (MoE, 2007, p. 27). Generally speaking, future Finnish principals face high expectations in pedagogy, management, leadership and self-development. They are especially expected to be sensitive in detecting future educational trends and innovative in meeting the needs. (MoE, 2007, p. 45.)

3.4 Overview of role ambiguity among school leaders

The existing literature on role ambiguity is mainly found in industrial sectors in western countries. Role ambiguity studies on academic leaders are rare and often mixed with role conflict studies. It is even more difficult to find some systematic role ambiguity studies in eastern educational settings, not to mention on school leaders. (Goldman & Chang, 1992, p. 3.)

In educational researches, Gmelch and Torelli (1993, p. 14.) pointed out the studies on occupational stress mainly focused on teachers in the 1980s, only a few were dedicated to school administrators. They stated that role ambiguity was strongly associated with administrators' burnout. The over expanding and ambitious role scale and responsibilities are to be blamed.

A group of researchers have focused on job stress among academic leaders. Burns and Gmelch (1992, p. 21) carried out a study on university department chairs in the United States. They found high role ambiguity was associated with high stress in the career of the participants. The chairs that experienced high role ambiguity had more concern in administrative activities than those who had low role ambiguity. They argued the reason for encountering role ambiguity is that the chairs were often caught in between administration and academia. Therefore the chairs' needs for scholarly activity and development should be recognized. (Burns & Gmelch, 1992, p. 28.) Some researches on high school department chairs indicated that when organizational change occurred, no clear job description or no professional support could cause role ambiguity. As a result, it could cause frustration in how to behave at work. (Mayers & Zepeda, 2002, pp. 54 – 59.) Otherwise the chairs were loaded with increasing responsibilities, yet without a consensus of their roles (Bliss, Fahrney & Steffy, 1995, p. 17).

Browne-Ferrigno's study (2003, p. 481) on new principals found that some principals reported uncertainty on their capability of assuming the position directly after some preparation programs because of their age, field-based administrative experience, gender or family responsibilities. Youth and inexperience can hamper their readiness for principalship. Similarly, Young and Brewer (2008, p. 106) also reported that principals at the preparation stage are likely to encounter ambiguity. However, they argued whether role ambiguity brought negative effect on new principals or not depended largely on how the ambiguity was fostered.

3.4.1 Principals' role ambiguity in China

There is a considerable number of researches (e.g., Song, 2001; Wang, 2003; Jiang, 2008; Zhu & Ruan, 2008; Liao, 2009) conducted on the topics of secondary school principals' role conflict, burnout, role overload or more generally, job stress. There is, however, no surprise in the scarcity of researches specifically focusing on ambiguity. Nevertheless, some studies imply the existence of this phenomenon and the negative consequence it produces.

In the principal responsibility system adopted in recent years, principals are loaded with high demands and expectations from society. Regardless of this, a number of them do not view themselves as principals but still as teachers. This is due to the lack of professionalism, which makes it difficult for principals to adapt to their new identity (Wang, 2003, p. 12). Zhu (2003, p. 83) referred to junior principals as the excellent ones that stood out of the teachers' group. They are strong competitors and eager to achieve but their high self-expectation often has a mismatch with the reality. After confronting the complex daily work, they tend to withdraw their ambitions. They feel confused about how their behaviours would result in others' eyes and in the not-so-familiar new environment. This stress surfaces as anxiety, low self-confidence, depression, frustration to the principal in question.

Not only during the beginning stage of principals' career, Tang (1996, p. 22) stated that principals had high needs for big achievements in their career. However, there are many factors that could limit their possibility to succeed. This uncertainty leaves principals under psychological pressure. Some role conflict phenomena described by Zhu and Ruan (2008, p. 214) could actually be seen as role ambiguity (see Figure 2), namely what principals expect themselves to do is not the same as in practice. For example, some found themselves simply becoming the microphone of the authorities instead of the decision maker for their schools' future. They are also frustrated at the fact that their roles as fundraisers or social relationship coordinators are taking over their role as educationists. Zhu and Ruan (2008, pp. 216 – 218) pointed the economic canon can not be applied to schools, because schools are the radiant points of civilization and the purpose of their existence is to educate better people for a better society. In other words, Chinese principals are caught in between the mundane and spiritual pursuit, like Burns and Gmelch (1992, p. 28.) depicted.

3.4.2 Principals' role ambiguity in Finland

With the increasing challenges loaded upon Finnish principals' shoulders, they are exposed to great pressure at work (Hargreaves et al., 2007, p. 23). However, most research spotlight is cast onto the teachers' group, who are regarded as the nation's educational backbone. Compared to Finnish teachers, Finnish principals fail to get enough attention (MoE, 2007, p. 29).

In a recent review of research on Finnish principalship, Risku and Kanervio found 28 Finnish doctoral dissertations on principalship during the first decade of the 21st century. 13 of these dissertations deal with principals' identity and their work. The rest of them focus more on the environment. Only one of them is written in English. Regular researches also address principalship but are again low in number and very often superficial. (Risku & Kanervio, 2011, p. 163.) Nevertheless, one could try to get some hints of Finnish principals' role stress through them.

Johnson (2007, p.11) argued that principals found themselves among contradictory expectations due to the flexible definition of principals' roles. For example, some principals are trapped between the teachers' rights to strike and the students' rights to quality education (Risku & Kanervio, 2011, p. 172).

The majority of education authorities think principals' responsibilities should include still more tasks (Kanervio & Risku, 2009, p. 108, as cited in Risku & Kanervio, 2011, p. 172), while many principals think their salaries haven't been raised to match their increasing workload (Johnson, 2007, p. 11).

Principals view their work as "comprehensive, demanding, future-oriented and including a lot of co-operation in managing practicalities" (Pennanen, 2006, p. 5, as cited in Risku & Kanervio, 2011, p. 178). However, they are reported not to have adequate pre-service training (Risku & Kanervio, 2011, p. 169) or support from superintendents (Johnson, 2005, as cited in Risku & Kanervio, 2011, p. 179). According to Salo and Sandén (2011, p. 28), principals in the Nordic countries tend to view themselves more confident in their pedagogical roles than in their managerial and leadership roles. Most of them are believed to have learnt their profession at work (Risku & Kanervio, 2011, p. 169). Similar to the Chinese review, there is not yet a systematic analysis focusing on Finnish principals' role ambiguity. The job stress phenomenon is more related to the role conflict topic.

4 RESEARCH METHODS AND PROCEDURES

This chapter introduces the aim of this study and the research questions it tries to answer, followed by the explanation on how this study was conducted in practice, including its timeline and the difficulties I encountered. Briefly, this is a qualitative study led by constructive paradigm as its philosophical underpinning and carried out in the form of a multicase study. Several main themes were extracted from interviews by the thematic analysis approach.

4.1 The aim of the study and the research questions

As already stated in the Introduction Chapter, this study tries to achieve the following aims. Firstly, it aims at bringing more comprehensive perspectives to the concept of role ambiguity and the challenging roles of principals nowadays. Secondly, it aims to probe the formation of role ambiguity among school principals and the possible coping strategies to it. Based on the adapted P-E role ambiguity model mentioned in earlier chapter, this study endeavors to detect the factors that contribute to the formation of a principal’s role-ambiguity as well as to explain the connection between them. Furthermore, as discussed earlier that role ambiguity is a transactional process (see Figure 5), this study is to find out principals’ coping process when a mismatch between principals’ needs for achieving their role and the inadequate supply from their work environment occurs. Thirdly, it expects that the findings will provide valuable information to practitioners in the two countries. It hopes to inspire the practitioners to design more pertinent principal training programs in the future.

Therefore, this study tries to answer the following questions:

1. What are the roles and traits of school principals?
2. What is the formation of the role ambiguity reported by principals?
3. How do principals cope with role ambiguity in daily work?

4.2 Research paradigm

Guba and Lincoln (1994, p. 105) defined research paradigms as the basic belief systems that guide the actions of researchers. Johnson and Christensen (2010, p. 31) regard research paradigms as approaches researchers have agreed on based on their shared values, assumptions, concepts and practice. Basically, research paradigms are the philosophical foundation of researches.

The research paradigms are developing throughout the time with new branches emerging to meet the needs of the rapidly changing world. However, new paradigms are often found as a result of “crossbreeding” among the traditional ones. (Guba & Lincoln, 2005, p. 192.) The four main paradigms are positivism, postpositivism, critical theory, and constructivism. They are defined based on what ontological, epistemological and methodological assumptions they possess. In other words, one can identify which paradigm it is by asking the following questions: 1) What are the nature and reality perceived in this research? 2) What is the relation between the researcher and the research objects? 3) How is the research conducted? (Guba & Lincoln, 1994, p. 105.) Guba and Lincoln (ibid.) argued that either the quantitative or the qualitative approach is more appropriate to be considered as a method instead of a paradigm. They are the next to be considered after the paradigm has been decided.

Constructivism is relativism, which assumes the understanding of reality as a mental construction process. Knowledge is created mutually by the researchers and the respondents. This process is socially, geographically and culturally bounded and the result is subjective and alterable. The researchers under this paradigm must interact with their respondents so as to distill their results and reconstruct precedent findings. In this paradigm, both quantitative and qualitative methods are considered appropriate. (Guba & Lincoln, 1994, pp. 110 – 112.)

Compared to positivism (Guba & Lincoln, 2005, p.196; Coolican, 2004, p. 45), post-positivism (Guba & Lincoln, 2005, p.196) and critical theory (Guba & Lincoln, 1994, p. 110; 2005, p. 196.), constructivism is the most suitable philosophy platform for this study, because role ambiguity is a result of person-environment interaction, which is contextually and individually bounded. Role ambiguity in principalship is largely subject to the personal ability and skills of the principal in question. Thus a certain degree of subjectivity and interactivity with the respondents helps to gain more insights to the research problem.

4.3 Rationale for choosing qualitative design

The rudiment of qualitative research was found as early as in the 1920s. Its formation was greatly shaped by the Chicago School in sociology on a fundamental level. (Flick, 2006, p. 17; Bogdan, 2007, p. 9.) However it was not until the late 1960s that the term qualitative research appeared in social science (Bogdan, 2007, p. 2). In the 1970s, qualitative research met its maturation and its research practice continued developing from then on (Flick, 2006, p. 18).

Qualitative research aims to construct new knowledge on a topic or phenomenon by analyzing and interpreting descriptive data collected via close observing and recording in the field (Flick, 2006, pp. 14-17; Bogdan, 2007, pp. 4 – 8; Johnson & Christensen, 2010, pp. 33 – 37). Qualitative research concerns the understanding of peoples' feelings, attitudes, beliefs, rationales and so on rather than just hunting for cause-effect relations. Qualitative research includes a variety of approaches or schools in social studies, for instance case studies, grounded theory, ethnography, action research, cultural studies and so forth. (Creswell, 1994; Coolican, 2004, p. 227; Flick, 2006, p. 24.; Johnson & Christensen, 2010, p. 49.)

Quantitative research is also a popular design in social studies. Philosophically and technically speaking, the quantitative method is a relatively passive way of conducting researches as it believes the reality is to be discovered rather than to be created. This, together with its rigorous data processing, leaves researchers less space to explore those statistically "insignificant" yet potentially "humanly significant" findings. (Coolican, 2004, p. 46; Johnson & Christensen, 2010, pp. 33 – 34.) Moreover, in order to make the study repeatable, data must be collected in a controlled and artificial setting. This detachment between studying subjects and the social context is largely criticized by social scientists. (Smith, 1983, pp. 8 – 10.)

Compared to quantitative research, qualitative research has more suitable features to support this study. Role ambiguity among principals is an unfamiliar topic both in Finland and China and there haven't been previous studies on secondary school principals' role ambiguity in the two countries. Therein, qualitative research is designed for less studied local topics or phenomena (Gillham, 2000, p. 11; Johnson & Christensen, 2010, p. 33). I chose to study a small group of principals in Shanghai and the Central Finland region as a pilot project to build in-depth knowledge of local cases, which my future research on a broader scale can rely on.

As mentioned earlier, my research topic and aims determined this study to be contextually sensitive and necessarily open to rare cases in real life. In other words, data came as it is. Quantitative studies often have to eliminate special or complex cases in order to generalize the findings in the population. It is argued that quantitative studies "are too blunt to capture the subtlety of stressful encounters". In this study, the focus is on understanding the process of a principal's role ambiguity. Therefore it is important to capture the details of a principals' stress experience. Only through qualitative methods such as semi-structured interviews and thematic analysis, can the richness of the data be taken into account throughout the research process and the results. (Flick, 2006, pp. 21 – 22; Bogdan, 2007, p. 4; Cooper et al., 2001, p. 183.)

Besides, qualitative research offers a platform where not only the diverse viewpoints from the principals are presented but also my perception and feelings based on my background can be acknowledged. The involvement of the researcher, known as reflexivity, provides a healthy way for the outlet of the unavoidable subjectivity in qualitative research and allows the researcher to contribute to the findings in a positive way instead of bringing bias and prejudice. (Patton, 2002, p. 495; Coolican, 2004, p. 235; Flick, 2006, p. 16.)

In a nutshell, the pure qualitative design and the pure quantitative design hold the two opposite ends of a continuum according to their respective features (Coolican, 2004, p. 48; Johnson & Christensen, 2010, p. 32). In practice, it is possible to locate a study anywhere on this continuum as long as it serves the researcher and the research well (Coolican, 2004, p. 47; Bogdan, 2007, p. 43). Nevertheless, the qualitative method suits this study based on two major concerns: 1) at the tentative stage of role ambiguity research among principals, it is necessary to have a mutual knowledge constructing process between the researcher and the researched; 2) qualitative research tends to cover the diversity in reality which can deepen my understanding of the topic.

4.4 Multiple-case study

Case study addresses exploratory and explanatory research questions by examining a particular subject, process, individual or event in detail (Bogdan, 2007, p. 69; Johnson & Christensen, 2010, p. 49). Case study is a research strategy that deals with a current phenomenon whose boundary is not apparent against its real-life context (Yin, 2003, p. 13). It has been widely applied in psychology, sociology, political science or even in economics studies. Case study can be explanatory, exploratory or descriptive, which is decided mostly by the nature of the research questions. For example, “what” questions indicate an exploratory style, while “how” and “why” questions are more explanatory. In this study, the focus of the research questions is almost evenly distributed on the two types of questions, therefore this study can be considered an exploratory and explanatory case study. (Yin, 2003, pp. 3 – 7.)

According to Yin (2003, pp. 45 – 46), this study is an embedded multiple-case study. Multiple-case study refers to the type of case study where the researcher deals with more than one subject, process, individual or event. (Gillham, 2000, p. 1; Bogdan, 2007, p. 69; Johnson & Christensen, 2010, p. 49.) In this study, five secondary school principals from Shanghai and five secondary school principals from the Central Finland region were interviewed. The experience of role ambiguity in principalship among those interviewed principals in Shanghai is named as Case SH, whereas that among the interviewed principals in the Central Finland region is named as Case JY.

Briefly, Shanghai has approximately 603,700 students who are studying in 762 secondary schools (Adult education, 2009), while there are 4,919 students studying in upper secondary general schools in the Central Finland region. There are 388 upper secondary general schools in the whole Finland. (“Education”, 2011; “Education statistics”, 2012.) The original motivation of choosing Shanghai and the Central Finland region as the case cites is based on my acquaintance with the educational settings in the two locations. Another reason is my interest in the two countries’ prominent achievements in education: Finland’s ever-victorious PISA result and OECD partner Shanghai-China’s impressive showcase in its first PISA test in 2009. (OECD, 2001; OECD, 2004; OECD, 2007, OECD, 2010).

The interview candidates were selected to give as much diversity as possible. The diversity includes differences in school context, career path, age, academic background, gender and rank. The participants in Shanghai were selected according to the maximum variation sampling technique. This technique allows sampling for heterogeneity. It assumes that if common patterns could be found despite of the variations, they must be paid attention. Maximum variation sampling is ideal for research projects with limited time and resources yet hoping to achieve a certain degree of representativeness by small samples. (Patton, 2002, pp. 234 – 235.) I exchanged my research ideas with my previous thesis supervisor in Shanghai. With the help of his enormous network of school principals in Shanghai, I was able to find five secondary school principals whose backgrounds reflect the multidimensional reality of the principals’ life locally. The same sampling scheme was planned to be applied in the Central Finland region. However, given the facts that the interviewee must be able to communicate fluently in English and there is no principal ranking system in Finland, it was not an option for me to apply the same sampling strategy. Thus the original plan was compromised by using convenience sampling, where I tried to reach as many principals as possible with the help from my institute and then interviewed the available ones (Patton, 2002, pp. 241 – 242). General information about the interviewees can be found in Appendix 8.

Given the difference in student population stated above, it was not possible to find schools with equivalent sizes as those in Shanghai. The work of the principals in secondary schools is much heavier than that of the principals in elementary schools, which therefore results in more mental problems for principals, this research limited the participants to only secondary school principals. The two cases were analyzed as individual units of analysis in an embedded style (Yin, 1989, pp. 45 – 46) with comparison and contrasting at the end (see Bogdan, 2007, p. 70).

4.5 Data collection

The data was collected through ten interviews conducted face-to-face with the secondary school principals individually in Shanghai and the Central Finland region. Interviewing allows researchers to understand well the perspectives of their respondents. Through interviews, the feelings, thoughts, and intentions are largely uncovered. (Patton, 2002, p. 341.)

The interview questions were designed in a semi-structured fashion based on my understanding on the multi-aspects of role ambiguity theory reviewed in earlier chapters (see Coolican, 2004, p. 153; Flick, 2006, p. 156; Bogdan, 2007, p. 104). The questions were grouped into three parts (see Appendix 6). The rationale of the interview questions is based on my research questions and aims. The first part focused on the basic information of the interviewees such as when, where and how the interviewees became principals; what was their earlier profession and so on. The second part asked the interviewees to describe their roles, their perceptions of role ambiguity and their coping strategies in terms of their own contexts. Their perceptions of teachers' roles were also asked to give a counter check of their understanding of principals' roles. Since principals' role ambiguity is closely related to their inexperience in the field, the third part naturally encouraged the interviewees to evaluate the current principal training programs and give suggestions on tackling the role ambiguity problem. Concerning operational convenience and literature support, I designed the original questions in English. When I interviewed the principals in Shanghai, I translated them into Chinese (see Appendix 7) and slightly amended some wording according to the Chinese social and cultural context without changing the meaning of the questions (see Bogdan, 2007, p. 93). To keep the validity of translation, I discussed and agreed the content with one professor in the field of educational administration in ECNU.

The first round of interviews was conducted in June 2008 for principals from public upper secondary schools in Shanghai. The second round of interviews was accomplished during November 2008 with four Finnish principals. In fact, I had three principals from public schools and one from a private school. Given the difficulty of reaching suitable Finnish participants, I had thought about enlarging the scale to both public and private school principals, which would be an even more demanding option. During October and November 2009, I came back from my abroad exchange study and finally approached the last two interviews with the Finnish principals from public schools. Although the process of finding participants was challenging and time consuming, the arrangement of completing interviews separately in Shanghai and the Central Finland region helped me to focus on one case at a time so as to prevent confusion during the research. (see Bogdan, 2007, p. 70.) Since I got enough Finnish principals from public upper secondary schools later, I had to exclude the interview with one private school principal from the research data to keep the focus of this research only on the principals from public sectors.

Since the interviews with the Finnish principals were in English, the interview question guidelines were sent to some of the principals in advance upon requests in order to familiarize them with the topic. All the interviews took place during the principals' normal working hours in their own schools. A digital audio recorder was applied to most of the interviews as a supplementary data collecting tool. Additionally I also took field notes on the interview content, the school environment and facilities etc. (see Bogdan, 2007, pp. 118 – 119).

The interviews were conducted in an informal but guided manner (see Coolican, 2004, p. 153). Although the interview length was agreed as about 30 minutes, the principals seemed to be very interested in this topic and spontaneous. The actual length of the interview varies from 39 to 95 minutes and only one interview is under one hour. The order of the questions asked in the field might not be the same as planned as sometimes the principals covered the later questions already in their answers to the earlier ones. When the principals mentioned something not covered in the interview guidelines but relevant to the topic, I encouraged them to explain more. In the end of the interview, those unanswered questions were reasked and answered. The transcription of the interviews contains 127 A4 size pages with single space front Times New Roman and Chinese Song Typeface.

4.6 Thematic analysis

Thematic analysis was applied in this study to analyze the data collected through the interviews. Thematic analysis picks up patterns from the data set, defines them into themes and searches for the underpinning of them beyond their semantic boundary. It is a less applied yet appropriate text-analysis technique for this study compared to other popular ones such as content analysis, conversation analysis (CA), discourse analysis (DA), narrative analysis, interpretive phenomenological analysis (IPA). (Coolican, 2004, p. 227; Flick, 2006, pp. 320 – 324.; Braun & Clarke, 2006, pp. 77 – 78.)

When choosing themes, thematic analysis does not select themes based on their quantitative prevalence in the whole data set as content analysis would do. Nor does it discard a large amount of data like IPA or DA. In thematic analysis, a theme is what captures important elements for the research questions. (Coolican, 2004, p. 571; Braun & Clarke, 2006, pp. 82 – 83.) Secondly, thematic analysis allows researchers to decide whether to provide a rich description of the data or focus on certain aspects. This is particularly helpful when studying an under-researched topic such as principals' role ambiguity, where the raw data can be quite diverse. Thirdly, this study doesn't aim at building a role ambiguity theory from sketch for principals. It intends to complement the existing framework and add unanticipated insights. In this sense, it is more apt to a hypothetico-deductive model, yet not really for testing the existing theories. Thematic analysis provides space for this flexibility. (Coolican, 2004, p. 232; Braun & Clarke, 2006, pp. 83 – 86.)

The actual data analysis started right after all the interviews were transcribed in December 2009. However, due to my responsibility as a local leader for a Finnish national educational project and an internship abroad, the analysis was completed finally in May 2012. During the data analysis process, the richness of the data yet the inexplicitness of principals' role ambiguity had driven the study to an impasse. However, believing in the existence and importance of principals' role ambiguity phenomenon, I went on searching for more literature to explain my findings. As a result, the P-E fit role ambiguity model emerged as a way out of the dead-end.

The themes for each case include internal and external attributions, reported role ambiguity, adaptation efforts and suggestions, which intend to comply with the P-E fit role ambiguity model (see Appendix 9). I analyzed the data according to the instructions of thematic analysis given by Braun and Clarke (2006, pp. 86 – 93). First of all, I familiarized myself with the interview transcript. At this level, I did not pay much attention to the details in the interviews, mainly to form some general ideas of the themes. Secondly, I started coding the raw data with initial codes. With my research questions in mind, I underlined as many interesting parts of the data as possible, and coded them with words that instantly came to my mind based on the literature review. Thirdly, I began combining the initial codes in searching for an overarching structure for them, namely the themes. Fourthly, I reviewed the candidate themes, evaluated their validity by checking whether they have enough data to support them, and if they could logically explain the whole data set, then I decided whether to keep them or not. Meanwhile, I came back to the whole data set to search for missing themes. This amendment process was repeated until the themes were able to form a logical structure that represents the whole data set.

As mentioned earlier, I found role ambiguity antecedents alone failed to explain principals' different role ambiguity profiles when coding the whole data set for the first round. In other words, the potential theme framework couldn't explain why some principals seemed to have no role ambiguity symptom. Therefore I rethought the whole puzzle and discovered the pattern within the data reflected the P-E fit model. The internal and external attributes represent principals' subjective understanding of their own status quo and the environmental status quo. The matching condition between the two helped to explain the formation of principals' role ambiguity and their coping strategies. The principals reported their role ambiguity which resulted largely from the mismatch between the internal and external attributions. Their adaptation efforts based on their internal and external resources helped to reduce role ambiguity until a new mismatch occurred and broke the balance.

The fifth step of the thematic analysis is to define and name the themes (Braun & Clarke, 2006, p. 92). The details of the themes, subthemes and categories are reported in detail in the following chapters. Meanwhile, some examples of the thematic analysis process could be found in Appendix 10.

5 FINDINGS OF CASE JY

The principals in this case tended to have homogenous understandings of principals' role, similar coping strategies with difficulties encountered in principalship. Findings of this case were categorized according to main themes, followed by subthemes and categories explained by data extracts. Some of the basic information such as their age, career path and information on their schools can be found in Appendix 8 (Part 1). All the participants in this case were in the principal's position for more than 15 years. All of them transformed directly from teacher to principal. Two of them had some leadership experience in external profitable organizations. The status among the principals is equal. Only one (Principal E) has received honours and awards from the authorities.

5.1 Internal attributions

Internal attributes here refer to the principals' value, personal traits, perceptions of their roles that could contribute to their understandings and coping strategies with role ambiguity. The principals in this case had clear self-expectations as principals and perceived themselves as transformational and sustainable leaders.

5.1.1 Open-minded

Open-minded was very often mentioned by the respondents as the type of person they expected themselves to be. It was either verbally conveyed or implied from their discourse. Enjoying diversity, tolerance to uncertainty, entrepreneurial spirit and motivation were coded as categories under this subtheme.

The respondents found themselves enjoying a wide range of diversity. They all enjoyed being with people as well as the variation from their staff and different everyday work. Some of them told the principal position had opened them to the multidimensional facets of working in schools, compared to their earlier post as a school teacher.

They seemed to well understand change as an unavoidable element in their working life and prepared themselves for peoples' different attitudes and reactions towards change. They also expressed their tolerance with different opinions from their supervisors, colleagues or parents.

Another trait existing in most of the respondents was entrepreneurial spirit. Two of the respondents had experience in starting their own business or project. One principal once took a managerial position of a company. On a broader scale, they were very willing to try new things in their career. Two respondents perceived principalship *"can't be that difficult"*.

All of them expressed that becoming a principal had never occurred to them in the beginning of their career as a teacher. They were mostly encouraged by their previous principals or friends. However it was their will to take the challenge that became the key motivation.

5.1.2 Transformational leader

The categories found under this subtheme were responsibilities, community leader and involvement. The respondents were very aware of their responsibilities for the development of the whole community. All of them saw themselves in a big mission and involved themselves actively in different local or national projects, for instance, national policy making, municipality curriculum work or developing the principal training program. Principal B identified the key differentiation between a subject teacher and a principal by their interest level in social affairs. She pointed out that being a principal was a hard job and not all the teachers were interested in it. It required the incumbent to have social abilities on a wider spectrum. According to her, subject teachers were very often interested and very qualified in their own subjects and they would go very deep and they were very good at that. However they did not have much interest in the whole society. Therefore, teachers and principals were after all different.

All of them enjoyed sharing their visions and goals with people. They also took pleasure in their possibilities to influence more people. When being asked if they would like to go back to teaching, four of them indicated teaching is a lovely job but would not consider going back, as they felt they are used to taking much more responsibilities. Principal E stated that being a principal allowed him to have the chance to meet people who were running the whole education system, thus giving him the opportunity to change the society.

5.1.3 Sustainable leader

The categories found under this subtheme were future vision and principal succession. The participants delineated their systematic and future oriented actions which demonstrated their traits of being sustainable leaders. They had strong interests in the future Finnish educational system and they had a clear vision for that. For example, Principal D stated improving schools and the school culture is very critical to the success of the education of today and tomorrow.

Principal A had been actively building a local school cooperation system as he believed this was the future for school development. They were also very well aware of the success continuation of leadership in their schools. Some principals who were near their retirement had been discussing with their potential successors and offering them vice principal positions or encouraging them to take part in principal preparation programs. According to them it was very important to maintain the school culture and this could be achieved by choosing the right candidate who would share the same passion and goal.

5.2 External attributions

External attributions here refer to the reported environmental features which either increase the demand from the principals or ease their tension.

5.2.1 Changes and uncertainties

The principals reported changes were happening all the time in the environment from all aspects. The participants held a common viewpoint that the basic education structure was changed too rapidly. Not all the changes were well planned beforehand and they came in too short period of time. Principal E told it was important to make a change but not necessarily change everything. He explained when changes were made, some very important things were lost at the same time. Yet not all the changes were unwelcome. For instance, principal training was improved largely according to the respondents. The training methodology and curriculum had been updated to meet the increasing needs.

Frequent changes naturally brought more uncertainties to principals' work, which was considered by some principals as a downside. Principal C found the main challenge of being a principal nowadays was that everything was uncertain. In the old days, schools ran as if everything was preset. It would get all kinds of resources and it would be fulfilling the national core curriculum guideline. Everything would just be fine. However, today principals would have to fight for the resources or even the existence of their schools.

5.2.2 Culture of trust and support

The categories under this subtheme were autonomy and external support. All the respondents held the same perspective that trust was the foundation of the Finnish school system. The respondents told they didn't have a supervision system where some people from outside the school would come to be a supervisor. Principals, teachers and schools enjoyed great autonomy. The upper secondary schools were trusted by the city that they were following the national curriculum guideline. Meanwhile, the principals were given big space to develop their school-based curriculum. Teachers are trusted by their principals in terms of their teaching quality. If a teacher was given a task, the principal would trust his or her ability to accomplish it. As Principal E told that he "*will not going to the corner and ask does he or she do it*". It was also very common that when principals were out of school, they could fully leave their office to their deputies (usually school teachers or vice principals) and seldom needed to worry about what was happening during the principals' absence. Trust was regarded as respect and loyalty and it existed on all levels. It was mutually held between people and organizations. Most importantly, it was withheld by the principal him or herself.

The respondents also told that they were supported by parents, students, colleagues, senior principals and the principal training institute in the beginning of their principal career. The participants indicated that most of the teachers were patient and they gave new principals time to adjust to their new roles. Some principals recalled that their assistants had helped them in financial management or administrative tasks which they were not familiar with due to their inadequate pre-office experience in this respect. Some respondents told that they had good experienced principals as their mentor, which turned out to be very helpful. Principal E had reached the retirement age but he still stayed in his school to develop young principals. The principal training institute had been credited by the participants in terms of organizing good education and a well-connected principal network for them to share their experiences and support each other.

5.2.3 External expectations

The respondents felt that the expectations from parents, students and their colleagues were mostly justified. The teachers expected principals to be the leaders who could bring them more resources, treat everybody fairly, protect and defend them under a difficult situation. The teachers also expected that they could freely discuss their problems with their principals. The students expected the principals' time for them and knowing them individually. They expect their principals to be role models for them. The parents expected principals to bring good welfare to their children and keep the learning atmosphere healthy. The superintendents and the municipalities expected the principals to keep their schools in good shape. They expected the principals to have good financial control over their schools. They also expected the principals to be flexible and in good contact with them.

Most of the respondents had tried their best to fulfill these expectations and they found it was not easy to achieve them. For example, Principal D told some parents had expected him to be like a "policeman" in the school, which he felt too demanding considering his workload.

5.3 Reported role ambiguity

Role ambiguity reported directly by respondents is named as socio-emotional ambiguity and task ambiguity (Kahn et al., 1964, p. 94).

5.3.1 Socio-emotional ambiguity

The participants found themselves caught in an unfamiliar and ambiguous situation with their colleagues and themselves. The categories found related to this subtheme were finding self in new role, uncertainty about one's performance and emotional stress.

The Finnish principals are seen as "first among equals", as they were teachers before and many became principals directly from their teacher positions (Hargreaves et al., 2007, p. 24). Finding self in new role was reported as a problem in the beginning of their principalship by Principal B and E, who felt it was difficult to see themselves in their new roles above their old colleagues and to exercise leadership. Principal D reported it was difficult for him to find out how to work with his old colleagues. He was not used to suddenly being their boss. Moreover, he felt himself more like a teacher instead of a principal and was looking at his new work still through the glasses of a teacher.

Apart from the confusion of their inter-personal relationship with old co-workers, some principals reported their doubt on their own performance due to their inexperience and youth had also raised some tension.

Some principals reported that when they needed to make a decision that was doomed to upset some colleagues, they found it very difficult to tackle as they were empathetic for them. They told this often brought them a lot of emotional stress.

5.3.2 Task ambiguity

Task ambiguity was reported in the categories as uncertainty of job content, dividing time into different tasks and how to perform.

Principal C found his job very ambiguous and contextual in general. He needed to achieve good performance, yet it was constrained by a lot of uncertainty. Principal A found himself distracted too much by handling students' difficulties, which he thought should be taken care of by specialized teachers.

When it came to dividing time in different tasks, four respondents considered that bureaucracy, numerous paper works and frequent meetings had consumed too much of their energy from pedagogical leading. They did not know how to divide their time and energy for so much seemingly relevant work. Principal C told that under such circumstances quick decisions must be made and he often felt it stressful. Principal E recalled his principal career and concluded that most of this type of work was unimportant. However when he was a young principal, he was not able to realize that.

All the respondents had difficulties in managerial tasks in the early stage of their principal career. In regard to human resources management for example, they found it difficult to deal with the conflicts between the teachers, to reduce personnel redundancy, or to choose a suitable candidate for a position. On one hand, the teachers were generally well qualified and enjoyed great autonomy, which they felt complicated to tackle. On the other hand, decision making concerning HR issues often triggered strong emotions. In this respect it could also be understood from the perspective of socio-emotional ambiguity as discussed earlier.

Apart from these, Principal A told that when he was a teacher, he knew how to teach students. However when he became a principal, he did not know much about planning subjects teaching and scheduling school activities during the first two years. He referred to this type of tasks as *"very, very difficult"* for him. Principal D pointed out that leadership tasks were always difficult for him. He expressed that *"You are never a good leader as you hope"* and one could not always get precise instructions on that.

In short, the tasks ambiguity principals reported could be divided into temporary task ambiguity, such as scheduling or reacting to occasional unknown events, which the respondents could solve through training; the other as long-term task ambiguity, such as balancing time, performing leadership or HR management, on which the respondents tended to spend relatively longer time groping their way out. In other words, as the respondents stated, the ambiguity period was not necessarily limited to the beginning stage of their career. It could come back in several occasions.

5.4 Adaptation efforts

Adaptation efforts refer to the actions principal undertake according to their internal and external conditions in response to the self-reported role ambiguity.

5.4.1 Active learning

Learning appeared as a prevalent subtheme across the whole data set. The categories belonging to this subtheme were peer support, learning by doing, training and self-development. All the respondents were very eager in self-development. They responded to their challenges at work place with a positive learning attitude which included participating in training, research and personnel exchange programs.

Trainings were sought according to the individual needs at different stages of the career in different forms. Three principals, who had not taken administrative roles before principalship, chose training programs from local municipalities or the local educational institute. All of them attended in-service training apart from their work.

More often, the respondents tended to help themselves. Peer support was a very common and effective practice among principals. The following two extracts depicted vividly the peer support culture locally.

> "Then on the first day when I was sitting in the principal's chair and in the first hour, I took a telephone and I called. His name is Z. 'Z, it's D calling. Now I'm a principal what I have to do? It's your fault that I am sitting here. [laugh] Tell me what to do!' And he was really, really (a) big help for me! He helped me in the first day, first step. And he was just laughing, 'Ok. First sit down and relax!'" --Principal D

> "I was reading. And I visited different principals' meetings, national and international. I tried to teach and I tried to learn always. And I always believe that you have a problem and you believe that someone knows. So why don't you ask? You don't lose your faces. And I have never met a principal who says that 'I know but I don't tell' [laugh]"—Principal E

Apart from asking for help, Principal D told learning from daily experience was also important, as *"the work itself helped"*. Principal C felt that as he became more experienced, the ambiguity had been eased gradually. The principals seemed to have a consensus that principalship is a life-long process and they would never be good enough for this job and that was why they had to learn always.

Principals agreed that different types of trainings had been useful for them. However Principal E emphasized that training could not replace the real teaching experience in schools.

5.4.2 Communication and cooperation

Communication and cooperation were frequently reported as strategies when the respondents met difficulties in their work. The categories included sharing information, discussion, teamwork and networking. The principals valued the importance of the feeling of their colleagues and students. They were interested in knowing what they believed was good in their schools and what was not.

> “I know most of them (the expectations). I speak a lot with my teachers. I have individual discussions between my teachers, quite a lot. And then I have individual sessions with my boss and we were speaking about our school my school and about the city and these things. So this some kind of good communication is really important.” –Principal D

The principals told that they dealt with external expectations through different communications strategies such as meetings and surveys. Principal B gave a good example of her communication tactic. She told that teachers were her closest ones to communicate in her school. She often went to talk to them like friends talking together during the breaks. Each year in her school they would organize a big survey for the students and their parents. The survey covered questions about the services in the school, the quality of teaching in classroom, the opportunities to choose different subjects, the safety and food at school and so on. Students were also welcome to talk directly to her and it happened sometimes. In fact, she interviewed all her students individually when they entered the school and when they were in their last school year. Teachers were given a questionnaire to reflect on how they experienced her leadership. The parents had her telephone number and they were welcome to call and ask.

The principals also told they always shared information with their colleagues. For them keeping information for themselves was not the practice at work. Meanwhile, cooperation with individuals or different authorities was often sought by the principals when they had difficult tasks. The respondents told they had reliable administrative teams around them in their schools. They also had a well-connected principal network where they often sought for support.

> “You must have network around you. Here, it’s good experience. I had 4 other secondary principals here. 6 principals was the most. We are a good team. We try to specialize, so that we know that he knows school laws. He concentrates the laws. He concentrates the learning process. He concentrates organizations. He is more interested in continuing education. And when I had a problem, I call him. And when they had some problem in some case they call me. And if I don’t know it’s my responsibility to find it out. So it was divided, loyal team. And not always just formal questions, sometimes just sitting down and talking, what’s your feeling.”—Principal E

Although networking activities seemed to be beneficial in solving principal’s problems, one respondent revealed it also consumed a lot of time and energy which should be saved for the classes and discussing lessons with their teachers.

5.4.3 Self-evaluation

As external evaluation was not so common in Finland, principals tended to evaluate themselves in terms of their self-expectations and performance against the external expectations on a frequent basis so as to help them be on the track. The principals were mostly satisfied with their performance. The accuracy of their self-evaluation was reported to increase alongside their accumulating field experience.

5.5 Suggestions

Some suggestions were given on the principal training programs and personnel specialization in principalship. The respondents gave high credits to the principal training programs, especially the one organized by the local principal training institute. They told there was no well-organized principal training system earlier. The one organized by the National Board of Education was found not so attractive for some of the respondents as it had relatively narrow scope of theories and examples. The training program in the university had developed very rapidly in recent years and had been received well by the local principals. It had a broad scope of curriculum and good methodology. The principals could update their knowledge through essay writing, seminars and discussions. Nevertheless, the principals suggested the principal training programs could have "*more realistic scope on learning*". The principals would like to learn more in teams and they suggested the assignments could be given in the form of teamwork. Some suggested the mentoring system was a good practice as well.

Some of the principals suggested a specialization in school personnel or even among principals in the same school, as it would help them focus better on their own responsible areas. Principal A, for example, told there could be a professional psychologist or social worker focusing on students with difficulties, had his school got enough budget for that. Principal D implied there could be someone in school who dealt particularly with bureaucracy, while Principal E told that due to the size of his school, they had two principals in charge of pedagogy and administration respectively. Although one of them was responsible for signing papers and leading, the other one was not called vice principal. The decisions were always made through principal meetings.

6 FINDINGS OF CASE SH

Unlike in Case JY, the principals in this case had less than 15 years of principalship experience. Nevertheless, most of them had been long time in the teaching positions and middle administrative positions such as chief of pedagogy and research, dean of studies and vice principal. Despite the similarities of their career paths, two of the respondents had worked in the local education bureaus. All of them earned a Bachelor's degree in their respective teaching subjects. However they had different statuses (Feng, 2003, p. 212), two of them were principals at special class, the rest of them were first class principals. The size of the schools in this case was much bigger than in Case JY. School 6 and School 9 were classified model schools (earlier as key schools) at the district level, school 10 was a model school (earlier as key school) at the municipal level, while the rest did not have any special classification (see Appendix 8, Part 2). The principals in Case SH showed similar perceptions of principals' roles. Their personal encounter of role ambiguity varied but could be understood through the following themes.

6.1 Internal attributions

6.1.1 Intrinsic motivation

The categories found under this subtheme were unexpected career, answering Party's call and gumption. All the respondents told they had never dreamed that one day they would become principals. Some of them did not even anticipate their career in education in the first place. Principal I told his original plan was to become an engineer. However due to some unexpected factors he landed in a normal university studying mathematics to become a maths teacher. It was a big disappointment for him as the status of teachers in the society was very low at that time. When he eventually started his teaching career in a secondary school, he gradually found his passion for education. When the new policy from the CPC at that time was to promote ICT education, he immediately changed his subject to ICT teaching and obtained another Bachelor's degree in computing. Principal F explained his reason for becoming a principal was to obey the arrangement from the CPC. Principal G and H recalled their promotions to the principal's office as unexpected decisions from the superior authorities, though they had been actively developing themselves. The respondents reviewed their experience in their earlier principal career as not being mentally prepared. They reckoned themselves loyal to CPC but having a relatively naive imagine of principalship.

6.1.2 Educationist

All the principals identified themselves as educationists above all. And they felt most comfortable within this role compared to being managers or leaders. Improving teaching quality, curriculum building, and low desire for power are found as the categories under this subtheme. Principal I pointed out that the two most important things principals should do were building quality teaching staff and sound curriculum, because after all the meaning of being principal was to serve the students. Principal G perceived that principals were first of all pedagogical experts, then administrators and thirdly leaders.

Besides being educationists, the participants understood their administrative roles required them to deal with different people from the society, ranging from educational authorities to construction companies that were responsible for the school renovation. They explained their leadership practice was more within the scope of their school. They had limited power to influence their communities as individuals or as a group of principals. Principal H told she would like to exercise more on her role as a social activist but she had limited resources to achieve it.

All of the respondents told that they did not have the desire for power like those government officials. They revealed that some other principals would see themselves as government cadres, which was earlier the image of school principals. However, the participants in this case refused to label themselves as government officials.

6.2 External attributions

6.2.1 Government administrative intervention

The respondents felt there was too much government administrative intervention into the school operation. Irrational demands and arrangements were found as the categories under this subtheme. They told schools had different conditions while the orders from the superior authorities came as the same, which left some weak schools more difficult to catch up with the others. Principal J told sometimes the new policies were against the rules of education. For instance, about a decade ago the lower secondary classes were forced to divorce from the upper secondary classes in some key schools where the two parts used to be together. The reason for doing so was to avoid the increasing competition in school selection among students and parents. The authorities believed that in doing so, the school selection pressure would be buffered and rechanneled in the future. Nevertheless, Principal J found this created an unnatural breakage of the long term process of fostering students. He indicated three years was considered too short for the school to get to know each student and discover their talents, which was in a way against the concept of quality education. Also some unexpected inter-school transfers for some principals were viewed as detrimental to their personal or organizational development, although from the authorities' point of view these arrangements were based on a good will of saving underperforming schools.

6.2.2 Immature system

Four of the respondents reported that the current education system still had a lot of flaws which hampered their ambition in education. Main complaints focused on the following categories: the contradictory image of quality education, regulations not fully observed and unclear principal responsibilities.

Principals told the quality education had been very confusing for them. On one hand, they had to go through a systematic change from curriculum to evaluation and to teacher training in order to meet the new supervision criteria. On the other hand, nobody dared to abandon the earlier test-based model as it guaranteed the desired good scores. Since the new curriculum didn't gain much confidence in practice and the old test-based practice became a taboo because of the promotion of quality education, principals felt left in a no man's land.

Principals also reported malpractice was common among schools. For instance, some schools set up key classes under some covering names to focus on the most potential students in order to keep the university entrance rate. Some schools secretly trialled lower secondary classes to preselect good students for its upper secondary part. These practices were thriving under the toothless regulations and variant local operation systems.

The principals found themselves with greater responsibilities under the new principal responsibility system, yet with insufficient autonomy. This created an image of lack of authority for the principals and hindered their executive power. The content of the new system lacked the manoeuvrability on a micro scale. The respondents would like to have clearer instructions in practice as well as an effective incentive system under the principal responsibility system.

6.2.3 External expectations

As reported by the respondents, they often received mixed and demanding external expectations that went beyond their self-expectations and ability. They found it difficult to meet all of them and viewed themselves as the "*disadvantaged group*" in the society. They indicated although education doctrine had been transformed into quality education, and they were expected to be the educationists of the society, the biggest expectation from the society to them was still to achieve high performance in the national university entrance exams. Three principals revealed the long term goal conveyed by the authorities to them was to build sound schools. However, each year they were assigned a target of reaching certain percentage of university enrolment rate, which drove them back to the test-oriented practice.

The principals told that parents expected their children to gain high scores in exams and not to be disadvantaged among the peers. Most of the principals had the experience of parents coming to argue about the unfair treatment given to their children. The cases were often exaggerated by the parents and should have been dealt with teachers or mid-administrators. Most of the respondents felt parents expected them to solve any problem for their children, which was not realistic based on the large number of students in the school.

They reckoned their teachers expected them to be able to promote their professional development. They indicated that young teachers would like to get help from principals' professional expertise while experienced teachers would like to see more opportunities of promotion. Generally speaking, principals were expected to be their teachers' role models at work.

According to the principals, students seemed to be the farthest group of people from them, with teachers and mid-administration personnel in between. However, after being years of teachers the respondents were confident about the students' expectations, which was to see principals around them more often and to have their principal being amiable and easy to approach.

6.3 Reported role ambiguity

The respondents reported role ambiguity from the perspectives of both socio-emotional ambiguity and task ambiguity. The respondents indicated their role ambiguity experience was most intensive in the beginning. Some felt their role ambiguity had been alleviated with the increase of their experience. Some told their battle with role ambiguity was continuous.

6.3.1 Socio-emotional ambiguity

Socio-emotional ambiguity was reported as complicated interpersonal relationship as its category. In the area of human resources management, the respondents mostly had problems in dealing with unqualified teachers and allocating remuneration according to teachers' performance. Some participants told it was easier to recruit teachers than to fire them. Other occasions such as promotion, evaluation and conferring classification were also problematic to them. Teachers were often dissatisfied with the results and suspected the principal had treated them unfairly. The principals told sometimes they needed to make tough decisions and their relationship with the teachers was undermined, which also made them feel very upset and stressful. The respondents pointed out the regulations sometimes had to compromise to the complicated interpersonal relationship, which made them confused about the way they should actually behave.

6.3.2 Task ambiguity

Task ambiguity was reported in terms of decision making, administrative tasks, work transfer, requesting information from superiors, responsibility ambiguity, and violation of chain of command. Although all the principals had rich experience in administration before they took office, they confirmed that they had no real decision making power until they became principals, not even when they were vice principals. According to the respondents, they were not involved in decision making process during their time as school administrators. In a school, the principal was the only decision maker and the rest were the executors. Because of this, they were nervous and stressed to make decisions, especially when they were just promoted to the position. Principal G told he was promoted directly from dean of studies to the principal position. Without a transitional period as a vice principal, he didn't know how to use his decision power.

Finance and legal tasks seemed to be challenging for all the respondents when they began their principalship. The respondents indicated that they didn't have any pre-experience or training in finance or legal management. Principal F and I told they were confused with financial management, especially when they needed to make a budget plan for a big sum of money allocated by the government.

> "I was asked to be in charge of the finance. The financial charts made me feel dizzy. Nobody has ever trained us. I don't need to be trained as a professional but I want to understand the basics. Every month I signed different papers but I didn't understand what the money were divided into. I mostly delegated the responsibility to the auditors and I didn't have enough time to take a close look at it. But as the legal representative of the school, I need to take all the responsibility if something went wrong. It was very stressful for me" –Principal I

Principal F told he encountered difficulties in dealing with school related legal issues and lacked the knowledge to execute. Principal G and I reported the endless meetings had compromised their energy in pedagogy. Principal G indicated this had undermined his enthusiasm in education.

The respondents told the confusing moment also occurred when they had a work transfer to a higher position or to another school arranged by the authorities. They told sometimes they were not fully explained the reason why they were transferred and they didn't know what they were expected in their new roles. Principal G was transferred from a promising secondary school to an underperforming one. Although his position as a principal remained the same, he felt great lost as he didn't understand if he was expected to save the other school or simply because he was disfavoured by the authority.

"You have to guess the meaning of your supervisors' words when they ask you to do something", told by Principal F. This appeared to be a very common practice in the other respondents' daily work as well. The instructions were mostly given in general terms and principals had to figure out the puzzles themselves instead of asking directly, which would imply incompetence in their comprehensive skills. Since requesting information from superiors was not always an option, the respondents felt their duties sometimes confusing. Principal I recalled his confusion to such extend that he didn't know if he did it correctly or even whether he should do it or not.

Another problem told by the principals was the uncertainty about their responsibilities. Under the principal responsibility system, they were supposed to be in charge of everything and responsible for all the outcomes. However that was simply impossible for one person when he or she had a big school. The principals felt ambiguous about how much responsibilities they should take for themselves and how much of them should be delegated to their administration teams.

Principal I reported that sometimes the violation of chain of command (Rizzo et al., 1970, p. 150) had disturbed him. He told that parents would often come directly to his office and demand him to deal with some problems their children had. He argued some of these problems could already be solved by the teachers or the mid-administrators, otherwise why those positions would exist in the school. Principal J specified that he dealt with the major problems such as students' safety, but the minor ones such as breaking rules should be dealt with by the Moral Education Department in the school.

6.4 Adaptation efforts

6.4.1 Compromising

Here compromising refers to a type of relatively passive adaptation strategy where the principals tried to change their own mindsets instead of changing the external factors. Under this subtheme, sacrifice and thinking from different perspectives were coded as the categories. Principal F told working in an environment with an unsound social system meant that one had to simply sacrifice him or herself and accept the system drawbacks. Principal G told that in order to survive the negative effect brought by role ambiguity, he tended to put himself in a bigger picture and realized that role ambiguity among principals was an inevitable phenomenon during the transition time to the principal responsibility system. Principal H encouraged herself to view this problem from a different perspective. She told that sometimes when she felt tired of being a principal, she began to think about the trust she was given by the superior authorities and the CPC. She reminded herself that the society needed her and therefore she must remain committed to her role whatever it would bring.

6.4.2 Being flexible

Transforming tasks smartly and delegation are the categories coded under this subtheme. Principal J told that very often the conveyed policy appeared to be ambiguous or even contradictory to their own plans for their schools. In these cases, he needed to find a way to implement the policy innovatively so that the main ideology was kept and it would also be doable according to the condition of his school. He implied it was also possible for him to avoid some unnecessary meetings and practice. However, not all the principals could enjoy this level of flexibility. Principal F told flexibility might be the privilege enjoyed by only high classified principals. Normal principals like him had to do whatever they were told to. Principal I and G found delegation a powerful tool to release their burden and arrange time more efficiently. Principal I told he had been delegating the financial management tasks to his mid-administrators. Principal G told he would ask some of his colleagues to attend some meetings on behalf of him occasionally.

6.4.3 Cohesion reinforcement

All the respondents believed that the cohesion building within staff could bring more harmony to their work environment. Communication, building mutual understanding, goal consensus and clarity (Rizzo et al., 1970, p. 161), encouraging each other are coded as the categories. Principal H suggested that it was very important to have the support from her teachers, which would not happen without her frequent communication with them. Her strategy was to organize informal or formal meetings to discuss with her colleagues and encourage each other. Through this strategy, she understood the teachers’ expectations better and the teachers also realized the difficulties of her job. Principal G, I and J told they tended to think the big picture and engage their teachers and staff with the same picture so as to minimize the ambiguity on an objective level.

6.4.4 Hands-on principalship

Meanwhile, Principal I and J indicated they often went beyond the mid-administrations to find out the real happenings in their schools.

> "Some principals like to sit in their office and listen to reports from the mid-level cadres. But I believe the real information comes when you go down to basic level of the school, to visit teacher's classroom, to talk to the guards etc. Then you know more than just the words on the paper"—Principal I

By listening to different people, they were able to clarify the misunderstandings and could have a more concrete understanding of their own job.

6.5 Suggestions

The respondents gave their recommendations on the current principal training programs. They told the current training programs usually enclosed a rich content, but they also required a large amount of time from the principals. Principal H told she came to the office every day at seven in the morning and left at seven. Most of the training schedules conflicted with her daily work. She recommended that half-day long training once or twice a week would be desirable. She argued the place for principals to learn is at their own schools and principals should come down to earth to understand their schools. Her opinion was echoed by the other participants. The principals suggested that the content of the training should be more closely attached to their real contexts. Four of them proposed that the training curriculum should include more practice of how to use the theories. Principal J concluded his perspective on the training theory/practice issue as follows.

> "Many principals say they don't need to learn so much of theory but more practice, only the professors in the universities need theories. But I think the share of theory and practice should be half and half. The current problem is not too much theory. It is that principals are not learning the theories in a systematic way. Very often, we learn a bit from this scholar and a bit from that scholar, from this country and that country. Sometimes they even conflict with each other. Principals are all practice based. But when you need to find theory to solve a problem in practice, there is no time for that. That's why principals need theories. But more important is for them to conclude their very own theory from their own practice." –Principal J

In regards of the training pedagogy, the participants indicated that although they had experienced many different learning forms, for instance workshops, seminars, lecturers and online discussion groups, they would like to have more personalized guidance such as mentoring by experienced and senior principals.

On a macro level, the respondents suggested laws and regulations should be further revised and their authority must be enhanced.

7 DISCUSSION AND CONCLUSION

This chapter discusses and concludes the findings of Case JY and Case SH in terms of the previously mentioned role theories, especially the adapted P-E fit role ambiguity model in Chapter Two. It also intends to answer the research questions of this study which are: 1) What are the roles and traits of school principals? 2) What is the formation of the role ambiguity reported by principals? 3) How do principals cope with role ambiguity in daily work? Meanwhile, it gives a review of this study in terms of its ethical concern and trustworthiness. At the end a recommendation for future research is presented.

7.1 Principals' roles and their self-perceptions

The roles of principals could be generally concluded into the following four aspects, pedagogical leaders, managers, transformational leaders and sustainable leaders (Hill, 2002, p. 43; Renihan et al., 2006, p. 21; Flockton, 2001, pp. 17 – 30; Hargreaves et al., 2007, p. 7). From the objective viewpoint, the roles of Finnish principals perceived by the Finnish society reflect pretty much the same construction as the aforementioned (Hargreaves et al., 2007, pp. 3 – 8, pp. 17 – 30). The objective perception of the roles of Chinese principals shows an emphasis on their pedagogical leading capacity and management skills, while the role as leaders is relatively less pronounced (Wang, 2003, pp. 39 – 48).

According to the findings, the Finnish participants tended to identify themselves with the demanding roles they were given by the society. They were aware of their roles as transformational and sustainable leaders. The findings showed that they have certain personal traits that could support their leadership roles, such as enjoying diversity, tolerance to uncertainty, involvement, future vision and so on (Fullan, 2002, pp. 17 – 30). In reality, the Finnish principals have strong expertise in pedagogical leadership. However, given that they came directly from teacher positions, they might be less confident in some management tasks and leadership skills. (MoE, 2007, p. 51.)

Compared to the Finnish participants, the Chinese principals identified themselves more on the level of pedagogical leader, which is seen as the foundation of principalship (Wang 2003, p. 39). Wang (2003, pp. 38 – 40) indicated that most of the Chinese principals do not have a say in making advanced decisions, for example on the evaluation system or school feature. This might be due to the government administrative intervention and the immature principal responsibility system which hindered the development of their leadership roles such as transformational leader and sustainable leader. From the internal perspective, the findings indicated they held relatively passive motivations of becoming principals. The participants did not anticipate their principal career. Most of them were simply answering the call from the Party to fill in the needs. They tended to accept it as natural that they needed uphold the rules and tradition in the educational hierarchy and be implementers rather than leaders. The findings also showed the participants' ambition in education was overwhelmed by everlasting administration routines (Feng, 2003, p. 211).

7.2 The formation of principals' role ambiguity

Role ambiguity refers to a condition where the focal person experiences the lack of well-conveyed job expectations or unpredictability on the outcome of his or her own role behavior (Kahn et al., 1964, p. 94; Rizzo et al., 1970, p. 155). The types of role ambiguity that the principals from the two cases experienced are task ambiguity and socio-emotional ambiguity (Kahn et al., 1964, p. 94).

Role ambiguity is an ongoing transactional process where the need and supply possessed by the environment and the individual in turn attempt to reach a balance (Edwards et al., 1998, p. 21; Cooper et al., 2001, p. 17). The traditional schools viewed stress as people's responses to external stimulus. Based on the new understanding of stress as a transactional process that describes people's relationship with environment, namely the P-E fit, no single variable could be called as stress (Cooper et al., 2001, pp. 4 – 9, p 21). It is believed that when the focal person fails to fetch resources from the environment to fulfill his or her tasks, he or she is likely to encounter ambiguity. However, if the focal person continues to get supplies despite the fact that his or her needs have been matched, then the over supplement could still result in role ambiguity. (Edwards et al., 1998, p. 21.) According to the findings, when and how the principals met their imbalance point, namely the role ambiguity moment and how the situation would develop from that point on, are highly individually bounded.

The most vulnerable period of principalship in the two cases seemed to be the time when the principals just took their office. New principals are more likely to be caught in role ambiguity situation as they are inexperienced (Browne-Ferrigno, 2003, p. 481). It was also evident from the findings that role ambiguity not only hindered principals' development in the earlier stage of their career but also could return to them when they encountered uncertain factors that prevented them from succeeding (Tang, 1996, p. 22).

Through the findings from Case JY, the external and internal attributions reported by the Finnish principals seemed to have good matches with each other. The external expectations for them were mostly considered justified, which indicated what the Finnish principals perceived themselves is congruent with the demands from the society. However, when they became principals for the first time, the demands to them raised immediately to a higher level than they were requested earlier as teachers. Since most of them do not have rich administrative experience, they encountered socio-emotional and task ambiguity such as not being sure how to behave with old colleagues or how to perform administrative tasks due to the lack of relative information or instructions (Kahn et al. 1964, p. 72).

The findings of Case SH showed that the self-perception of the principals as educationists seemed to be in line with what they are officially expected by the authorities. However, due to the legacy of the test-oriented education, the expectations for them were focused mainly on their capability to improve the exam performance. Instead of getting clear expectations, the Chinese principals very often have to ponder by themselves about what exactly they are supposed to be. The mismatch of the internal and external expectations and the absence of definitive feedback or information (Pearce, 1981, p. 671) resulted in experienced ambiguity for principals.

7.3 Principals' coping strategies

Traditionally, individual coping strategies are linked to their stable personal traits, enduring behavior or personal characteristics. Based on the transactional perspective of role ambiguity, coping behaviors endeavor to master, reduce or tolerate the discrepancy between the internal and external demands. The individual tends to appraise his or her stress situation in terms of available resources, thereafter coping behaviors are initiated as a result. Individual's coping behavior could reshape the nature of stress encounters (Cooper et al., 2001, pp. 160 – 161).

Role ambiguity is believed to affect the effectiveness of academic leaders. Nevertheless, those who have a positive attitude towards their work environment encounter less role ambiguity (Wolverton et al., 1999, p. 89). The Finnish principals seem to be able to deal with role ambiguity in an active and effective manner. When they encountered ambiguity for the first time at work as a new principal, they actively sought for resources and used it to turn the situation in favor of them. Their coping strategies included active learning, communicating and cooperating and self-evaluation, which reflect the characteristics of a transformational leader. The Finnish principals appeared as change agents themselves. They tend to create a supportive learning community, engaging people into the change process by means of peer learning, individual coaching and networking. (Flockton, 2001, pp. 17 – 30; Fullan, 2002, p. 17.) Additionally, the culture of trust, support and connecting people helped them to appraise their situation.

The findings showed that the Chinese principals are relatively conservative in their coping strategies compared to their Finnish colleagues. The Chinese principals tended to view stress as a responsibility that comes along with the principal position. They tried to change themselves rather than the environment. When they encountered ambiguity occasions, they applied relatively traditional such as communicating, building mutual understanding, goal clarification. This may due to the fact that they had relatively passive motivation when they decided to become principals and limited autonomy under the centralized education system (Yang, 2006, p. 72). Rizzo et al (1970, p. 161) argued both the leadership and the organization practices had a significant effect on role ambiguity. The practices of adequate of communication and planning can lower role ambiguity.

7.4 Professional development

The findings supported the negative effect caused by role ambiguity for principals. The respondents from the two cases reported stress as an outcome of their experience on role ambiguity. Some Chinese respondents reported the ambiguity has hampered their personal development. The respondents suggested the training programmes could be organized in a more individual, flexible and practical way. Apart from the training, the mentoring by experienced principals is desired by the respondents in both cases. Last but not least, the findings also suggested that there could be a collaborative leadership model where the total responsibility could be split and taken by two principals in the same schools. One could take the role as pedagogical leader and the other could take care of the administrative tasks and so on. (Browne-Ferrigno, 2003 p. 484.)

7.5 Ethical concerns

Ethical concern is immersed in all aspects of the research procedure (Flick, 2006, p. 49). The ethical soundness of this study is reviewed from the perspective of scientific quality, dignity and rights of the participants and their welfare (Bogdan, 2007, p. 48). Firstly, I discussed and refined my research topic during the research seminars organized by the Institute of Educational Leadership so as to ensure this study could bring fresh knowledge to the field (see Flick, 2006, p. 48). My topic received positive feedback on its novelty and necessity from my colleagues. The research proposal was then conducted and approved by the Institute of Educational Leadership. Moreover, since this study was conducted in the two countries with different culture backgrounds, issues concerning social and cultural traditions were considered when I reported the findings. Nevertheless, the findings were distorted or fabricated. (Bogdan, 2007, p. 50.)

Secondly, concerning the dignity and rights of the participants of my study, I sent the research permit requests (see Appendix 4 and 5) issued by the Institute of Educational Leadership to each one of the potential participants. The requests were mainly to explain them my topic, to assure the confidentiality of their information, to inform the duration of the interview and to gain their consent of voluntary participation (see Flick, 2006, p. 49; Bogdan, 2007, p. 50). The research permits for Chinese participants were translated into Chinese. The Institute of Educational Leadership helped me in finding the potential interviewees in Central Finland region while my earlier thesis supervisor in East China Normal University gave me the contacts of some of his acquainted Chinese principals in Shanghai. I approached these principals by sending them the research permits by email. Except for one rejection, the rest agreed to participate in my study. Individual interview and audio recording were performed only after the principal's consent. One principal rejected to be recorded, therefore I simply applied field notes instead of a recorder (see. Bogdan, 2007, p. 118). The names of the principals interviewed and the schools they work at were coded anonymously. Interview quotes were used only when they were related to the role ambiguity topic. (see Flick, 2006, p. 49.; Bogdan, 2007, p. 50.)

Thirdly, in regard to the welfare of the participants, I considered the risks I could bring to the participants against the new knowledge I benefited from them (see Flick, 2006, p. 48). I carefully conceived the interview questions and they were reviewed by the Finnish professors and peers as well as one Chinese professor to avoid problems in regard to gender, age or social background discrimination (see Coolican, 2004, p. 599). When I conducted the interviews at site, I paid great attention to the depth of the interviews, if, for example, recalling a past failure in their career would bring them strong emotions. As a researcher, I am fully aware of the dilemma of how much detail about the context needs to be revealed in case study (see Flick, 2006, p. 50). On one hand, descriptiveness is the key to a rich qualitative study. On the other hand, the rich description could bring the chance of revealing the identities of the participants given the small scale of this study. After cautiously weighing the two opposite interests, I decided to keep the information of their years of principalship, previous work experience, school size and faculty (see Appendix 8). The authenticity of the last three entries was kept because they are critical to the study. The entry of years of principalship was reported in approximate numbers. Meanwhile, the entries of gender, teaching subject and age were omitted. All these efforts were made to minimize the possibility of leaking participants' identities mainly due to the well-connected principals' network in the Central Finland region. Given the large population of school principals in Shanghai, guessing identities of the participants wouldn't be as easy as in Finland. However the information was presented in the same fashion as in the Finnish case so as to keep the congruence of the data display.

7.6 Trustworthiness of the research

The trustworthiness of a qualitative research could be reviewed in terms of its credibility, transferability, dependability and conformability (Lincoln & Guba, 1988, p. 3). Credibility is one of the most important criteria of assessing the quality of a qualitative research. It refers to whether the study is able to capture the actual phenomena that the researcher intends to focus on. (Shenton, 2004, p. 64.) In this study, the soundness of the research procedure was ensured by regular meetings with my thesis supervisors and peer debriefing in the research seminars with my colleagues (Flick, 2006, p. 370). Since I have been studying educational administration in both China and Finland, I had gained adequate familiarity already before I went to the field work (Shenton, 2004, p. 64). The qualitative methods applied in this study give the possibility of providing rich and descriptive data. However it might be compromised in a case study due to the ethical concerns (Flick, 2006, p. 50). The interview questions were designed based on previous studies and they were reviewed with professors from the field of educational leadership in the two countries to ensure they suit my interest and the local contexts. This study is written in English, which is not the mother tongue of either the researcher or the principals who participated in this study. Though I tried to maintain the content as original as possible through peer review, nuances might inevitably appear. Additionally, the Finnish literature review relied largely on the few existing English copies. Thus secondary sources had to be considered as my option.

Traditionally, random sampling is preferred to reduce researchers' bias in selecting the participants (Shenton, 2004, p. 64). In this study, maximum variation sampling was applied in Case SH while convenience sampling was applied in Case JY (Patton, 2002, pp. 234 – 235, pp. 241 – 242). Although the validity of convenience sampling is questioned by some researchers, it is the only strategy I could apply in Case JY given the limited resources (Patton, 2002, p. 242; Flick, 2006, p. 130). Before I analyzed the whole data set, some samples of thematic analysis were sent to my thesis supervisor to ensure I used the correct analysis techniques.

Another criterion for the trustworthiness of a qualitative research is transferability. It refers to whether the findings of the study could be applied elsewhere. (Shenton, 2004, p. 69.) The findings from this study might not be applicable to a greater area than Shanghai and the Central Finland region. I did not intend to generalize the findings because human behaviour often contains too many specific elements which should not be taken as granted for duplication (Gillham, 2000, p. 6).

Dependability refers to the reliability of qualitative research, namely if other researchers would be able to repeat the same results by studying the same participants with the same methods within the same contexts. Given the changing nature of role ambiguity phenomenon, this study is to serve as a "prototype model" with its detailed description of the research methods. (Shenton, 2004, p. 71.)

Conformability refers to the objectiveness of the study. The researcher must ensure the findings are the experience of the participants and not the researcher's own invention. Triangulation could help to promote the conformability of a qualitative research. (Shenton, 2004, p. 72.) Triangulation in qualitative studies means to compare different perspectives on the same issue as a matter of completeness of the study, rather than seeking for accuracy of the results (Coolican, 2004, p. 580). In this study, the content of the interviews was triangulated with official documents and literature on role ambiguity among school principals. Since most of the previous role ambiguity studies were in quantitative approaches, they provide a holistic view on the role ambiguity phenomenon.

7.7 Recommendation for future studies

It would also be interesting to conduct a profound investigation on the role ambiguity variables and moderators (Frone, 1990, p. 309). However, first of all, it is beyond the scope of this study and it is always subject to the research context. Nevertheless, questions like: how to distinguish antecedents and consequences from the variables (e.g., propensity to leave); how to develop variables from subjective and objective dimensions (especially in personal traits); what exactly are the meaning of these variables in different study contexts, are for future researchers to ponder.

At this stage, this study concerns mainly the principals' self-report role ambiguity and improving the insufficient existing organizational role theory. Other directions of role ambiguity study could focus on the role senders, namely teachers or school staff, or role sending process as a majority of researchers have chosen to study the focal person and their responses; (King & King, 1990, p. 58; Bauer & Simmon, 2000, p. 7) or to enhance the psychometric quality, in other words, from a cognitive role theory perspective (King & King, 1990, p. 62; Biddle, 1986, p. 74).

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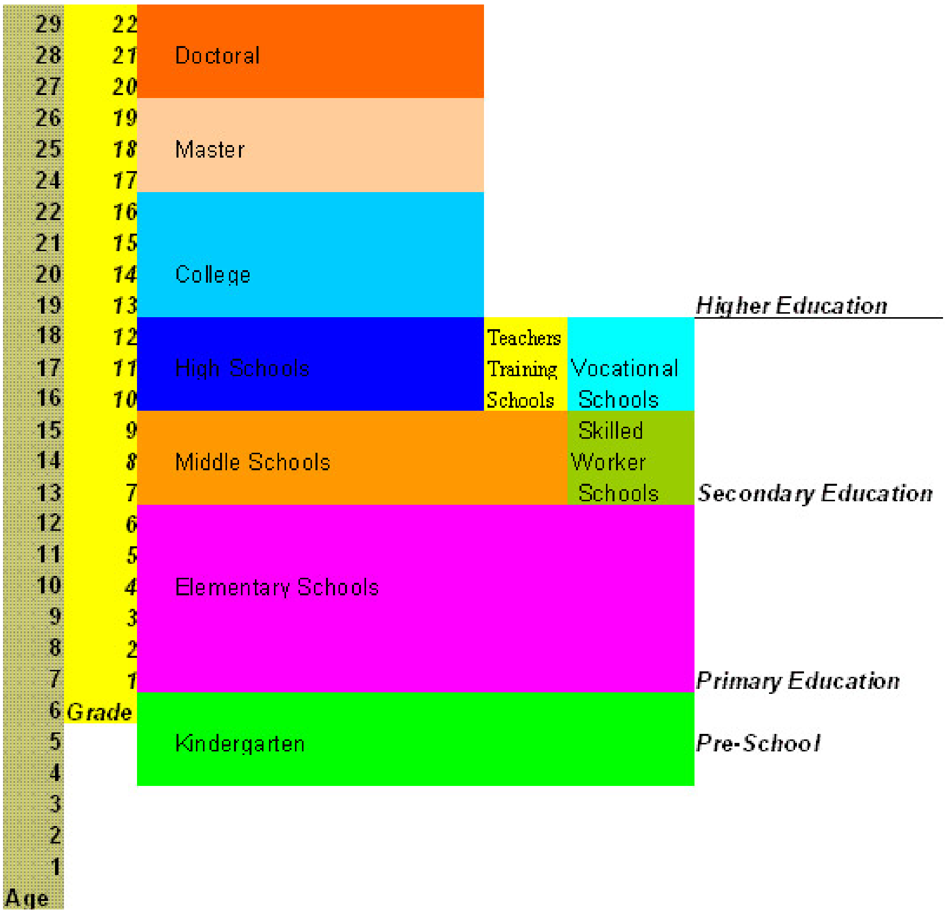
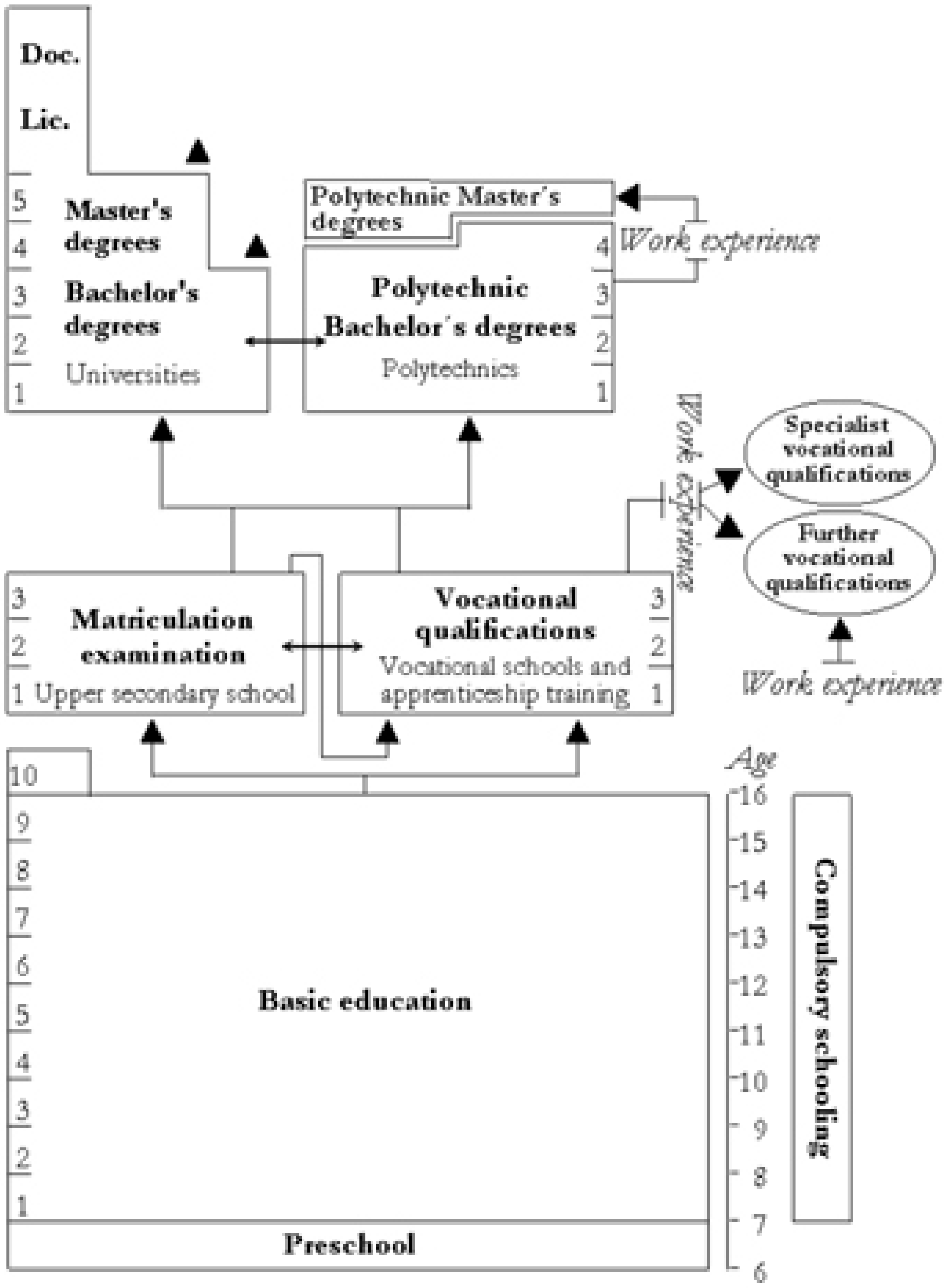
APPENDICES

APPENDIX 1 THE EDUCATION SYSTEM OF CHINA



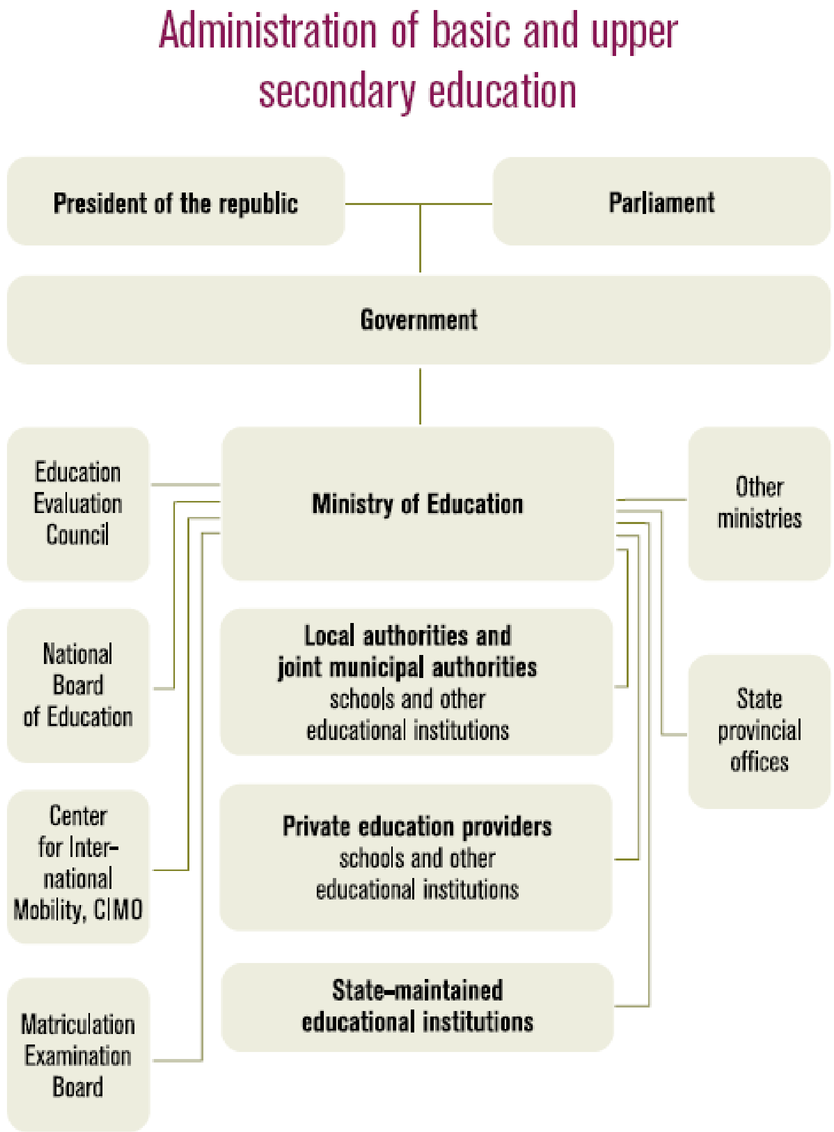
The Education System of China. Retrieved October 30, 2009, from the World Almanac of Educational Technologies at http://www.waet.uga.edu/wiki/index.php/China

APPENDIX 2 THE EDUCATION SYSTEM OF FINLAND



Retrieved May 17, 2008, from the Finnish National Board of Education at http://www.oph.fi/english/SubPage.asp?path=447,4699

APPENDIX 3 ADMINISTRATION OF BASIC AND UPPER SECONDARY EDUCATION



Retrieved from http://www.minedu.fi/export/sites/default/OPM/Koulutus/koulutusjaerjestelmae/liitteet/sv_liitteet/Administration_of_basic_and_upper_secondary_education.pdf

APPENDIX 4 RESEARCH PERMIT REQUEST

Dear participant,

I am a student in the Master's Degree Programme in Educational Leadership, where I am writing my Master's thesis on the topic of "*Role ambiguity among School Principals in China and Finland*".

The purpose of this study is to explore secondary school principals' roles in Finland and China, to find out what was or is confusing or unclear in terms of their role as school principal, as well as to understand their coping strategies against role ambiguity. Moreover it aims to provide practitioners information in this relatively new research area and call for more attention on principals' role ambiguity in the field.

I am requesting for your kind permission to collect the research data in your institution at the time of your convenience. The research data to be collected would consist of school photographs and interview records. The interview takes approximately 30 minutes.

The data is collected and used for research purposes only and will be dealt with anonymously.

Please contact director Jukka Alava of the Institute of Educational Leadership in the University of Jyväskylä (tel. 358-14-2601897/358-40-7380134, email alava@edu.jyu.fi), if in need for additional information.

Yours sincerely,
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Email: lili@jyu.fi

APPENDIX 5 CHINESE VERSION OF RESEARCH PERMIT REQUEST

尊敬的校长，

您好！

我是一名教育领导学专业的硕士生，正在进行个人的硕士论文研究。我的论文题目是中国与芬兰校长的角色模糊问题。

该论文旨在探究芬兰及中国中学校长的角色，以及校长角色中存在的疑惑及不明确之处，并且了解校长针对角色模糊所采取的应对策略。同时，该论文的目的还在于为教育从业者提供有关这个相对较新的研究领域的实践信息，并引起学界对校长角色模糊问题的更多关注。

是以在此诚心邀请您在方便时接受我的采访 (约 30 分钟)，并允许我在您学校中采集图像资料（主要以景物照片的形式）。

所采集的资料仅用于本篇硕士论文之研究分析。访谈内容绝对保密并以匿名形式编码处理。所有图像资料亦不会公开。

如有疑问，请联系我所就读的芬兰于韦斯屈来大学教育领导学院院长 Jukka Alava 先生。（电话：358-14-2601897/358-40-7380134，电子邮件：alava@edu.jyu.fi)

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APPENDIX 6 INTERVIEW QUESTIONS

Role-ambiguity among Principals in China and Finland

1. Can you talk about your background and jobs you held as an educator before you became a principal? (Basic information)

Possible follow up questions:

i. What subjects did you teach? (Basic information)

ii. How long did you teach in these schools? (Basic information)

iii. How old are you? What kind of honor do you have? (Basic information)

2. Can you tell me about being as a principal? (Basic information, role perception):

Possible follow up questions:

i. When did you first become a principal? (Basic information)

ii. What is it like about being a principal in Central Finland? (Basic information, role perception)

iii. Why did you want to become a principal? (Motivation)

iv. Can you tell me about the things that you like or dislike about being a principal and why you stay? (Motivation)

3. Can you talk about your work as a teacher? (Basic information, role perception)

Possible Follow up questions:

i. Thinking back on your career, can you tell me about what is it like about being a teacher in Central Finland? (Basic information, role perception)

ii. Can you talk about what is attractive about being a teacher? (Motivation)

iii. Have you ever considered returning to being a teacher? (Motivation)

4. Can you talk about the expectations others have for you as a principal? (Role perception)

Possible follow up questions:

i. Can you tell me about who holds expectations for you as a principal? (Role perception)

ii. Can you talk about the expectations that you have for yourself as a principal? (Role perception)

iii. Tell me about the challenges that you face as a principal? (Role perception)

iv. Can you talk about how you handle multiple and diverse expectations for you in the principalship? (Role perception)

5. Can you tell me about how your school is organized? (Role perception)

Possible follow up questions:

i. How would you describe the relationship between the teachers and the principal in the schools where you worked previously? (Role perception)

ii. Can you describe the position hierarchy from teacher to principal in your present school? (Role perception)

6. Can you talk about programs that helped to prepare you to become a principal? (Principal training)

Possible follow up questions:

i. Can you tell me how and where you got this training? (Principal training)

ii. Can you talk about the things in the training that benefitted you most in your job as a principal? (Principal training)

iii. Having been a principal what suggestions would you have for training future principals? (Principal training)

APPENDIX 7 CHINESE VERSION OF THE INTERVIEW QUESTIONS

中国与芬兰校长的角色模糊

1. 谈谈你在担任校长前曾有过怎样的经历？ (基本信息)
可展开如下问题:
i. 你曾经教什么科目？(基本信息)
ii. 你担任了多久的教师？(基本信息)
iii. 你的年龄是？曾被授予怎样的荣誉？ (基本信息)

2. 谈谈你作为校长的感受？ (基本信息，角色认知):
可展开如下问题:
i. 你第一次担任校长是在何时？(基本信息)
ii. 谈谈你在上海担任校长的感受？(基本信息，角色认知)
iii. 你为何想成为校长？(动机)
iv. 谈谈你作为校长喜欢和不喜欢的事，是什么驱使你留任？(动机)

3. 谈谈你作为教师时的工作情况。 (基本信息，角色认知)
可展开如下问题:
i. 回顾你的职业生涯，谈谈你在上海担任教师的感受。 (基本信息，角色认知)
ii. 你认为教师职业的吸引力在哪里？(动机)
iii. 你有没有考虑过重新回到教师职位？(动机)

4. 谈谈别人对你作为校长的期望？(角色认知)
可展开如下问题:
i. 谈谈作为校长那些人对你富有期望？(角色认知)
ii. 谈谈作为校长你对自己有什么期？(角色认知)
iii. 谈谈作为校长你所面临的挑战？(角色认知)
iv. 谈谈你怎样处理这些多重期望？(角色认知)

5. 谈谈你的学校的组织情况。(角色认知)

可展开如下问题:

i. 请描述你所工作过的学校里的教师与校长的关系。(角色认知)

ii. 请描述你学校里教师与校长的职位之间存在哪些等级的职位？(角色认知)

6. 哪些培训课程帮助你成为校？(校长培训)

可展开如下问题:

i. 你在哪里接受校长培训？(校长培训)

ii. 校长培训中的哪些部分对你的校长工作有最大的帮助？(校长培训)

iii. 作为一名校长，你对未来的校长培训工作有什么意见和建议？(校长培训)

APPENDIX 8 OVERVIEW OF PARTICIPATING PRINCIPALS AND GENERAL INFORMATION OF THEIR SCHOOLS (PART. 1)

Location	**Principal**	**Years of principalship**	**Previous work experience**	**School**	**School size (students)**	**Faculty**
The Central Finland region	A	More than 15 years	Teacher for 11 years, teaching & leadership counselor, company director	1	530	39 (1 assistant principal)
	B	More than 15 years	Teacher for 12 years	2	200	12 (1 vice principal)
	C	More than 15 years	Teacher for 7 years	3	200	15 (1 assistant principal)
	D	More than 15 years	Teacher for 16 years, Vice director in one organization, coach	4	500	38 (1 vice principal, 1 assistant principals)
	E	More than 25 years	Teacher for 8 years	5	625	60 (1 more principal, 1 vice principal, 1 assistant)

Note. All the numbers are counted until year 2009.

APPENDIX 8 OVERVIEW OF PARTICIPATING PRINCIPALS AND GENERAL INFORMATION OF THEIR SCHOOLS (PART. 2)

Location	**Principal**	**Years of principalship**	**Previous work experience**	**School**	**School size**	**Faculty**
Shanghai	F	More than 10 years	15 years teaching (including head of the grade), 8 years dean of studies	6	1700	112 (principal and Party secretary same person, 2 vice principals)
	G	More than 10 years	4 years teacher, 3 years dean of studies, 1 year vice president	7	700	75 (1 party secretary, 2 vice principals)
	H	More than 5 years	5 years teaching (including class teacher, 2-3 year student and administration work) 1 year assistant principal, 3 years Vice principal, 2 years party secretary	8	1000	109 (1 party secretary, 2 vice principals)
	I	Less than 5 years	17 years teacher to chief of pedagogy and research, vice dean of studies, 2 years in local education bureau, 3.5 years as vice principal	9	2000	170 (1 party secretary, 3 vice principals)
	J	More than 10 years	13 years teacher, 8 years vice dean of studies and dean of studies, 5 years local education bureau, 2 years vice principal	10	2000	140 (1 Party secretary, 3 vice principals

Note. All the numbers are counted until year 2009.

APPENDIX 9 OVERVIEW OF THEMES AND SUBTHEMES FROM THEMATIC ANALYSIS (PART. 1)

Case JY categories	Case JY Subthemes	Themes	Case SH Subthemes	Case SH categories
Enjoying diversity; tolerance to uncertainty; entrepreneurial spirit; motivation	Open minded	**Internal attributions**	Intrinsic motivation	Unexpected career; answering Party's call; gumption
Responsibilities; community leader; involvement	Transformational leader		Educationist	Improving teaching quality; curriculum building; low desire for power
Future vision; principal succession	Sustainable leader			
	Changes & uncertainties	**External attributions**	Government intervention	Irrational demands and arrangements
Autonomy; external support	Culture of trust & support		Immature system	Contradictory image of quality education; regulations not fully observed; unclear principal responsibilities
	External expectations		External expectations	
Finding self in new role; uncertainty about one's performance; emotional stress	Socio-emotional ambiguity	**Reported role ambiguity**	Socio-emotional ambiguity	Complicated interpersonal relationship
Uncertainty of job content; dividing time into different tasks; how to perform	Task ambiguity		Task ambiguity	Decision making; administrative tasks; work transfer; requesting information from superiors; responsibility ambiguity; violation of chain of command

APPENDIX 9 OVERVIEW OF THEMES AND SUBTHEMES FROM THEMATIC ANALYSIS (PART. 2)

Case JY categories	Case JY Subthemes	Themes	Case SH Subthemes	Case SH categories
Peer support; learning by doing; training & self-development	Active learning	**Adaptation efforts**	compromising	Sacrifice; thinking from different perspectives
Sharing information; discussion; teamwork; networking	Communication & cooperation		Being flexible	Transforming tasks smartly; delegation
	Self-evaluation		Cohesion reinforcement	Communication; building mutual understanding; goal consensus & clarity; encouraging each other
			Hands-on principalship	
	Principal training	**Suggestions**	Principal training	
	Personnel specialization		Revising & enhancing laws & regulations	

APPENDIX 10 EXAMPLES OF THEMATIC ANALYSIS (PART. 1)

Refined themes	Potential themes	Coded for	Data extracts
Reported role ambiguity Adaptation efforts	Finding self in new role	Ambiguity Finding self in new role	"One of the difficulties and the confusion that I had at the personally level experience was of course trying to find my role within the staff. Because we were colleagues, and I became the principal from them." – Principal B (p.22)
		Ambiguity, new role	"It was really confusing and it was totally new world. And to see how the teachers work from the other side of the desk it
	Task ambiguity Active learning	Uncertainty of job content	was quite confusing start. Because I didn't know exactly how the principal works. I was looking this work through the
		Difficult to adapt to new role, learning, peer support Learning by doing	glasses of P.E. teacher and I started to learn how to work as a principal just day by day and asking colleagues and the work itself helped me a lot and also I was at the same time studying
	Coping strategies	Principal training Discussion, networking	at the institute of educational leadership and I had a lot of good colleagues they are studying in the same position and I got a lot of good discussion with them and also I got more info and so on. I learnt day by day more and more everyday."

Socio-emotional ambiguity	uncertainty about one's behavior new role role ambiguity as a process	"Big problem was because in that school we had three teachers of P.E. How to work with them? Because I have been there. First we have done the same work with them. And now I am supposed to be their boss. And it was also difficult for me and difficult for them because I felt myself more as a teacher of P.E. than a principal. After 1 or 2 years it was quite easy. And now when you go the new school I started here it was just quite easy" – Principal D (p. 40)

APPENDIX 10 EXAMPLES OF THEMATIC ANALYSIS (PART. 2)

Refined themes	**Potential themes**	**Coded for**	**Translation**	**Data extracts**
Reported role ambiguity Adaptation efforts	Task ambiguity	Inexperience Hierarchy Mentoring	“Some people have difficulty in transforming from a teacher to a principal, some don’t. I belong to those who have difficulties. Why? It doesn’t relate to one’s smart skills, but has to do with one’s <u>experience</u>. Namely, it is the best for a principal to be promoted one level at a time. <u>For example, from the head of the grade to chief of pedagogy and research, from a basic administrator to mid-administrator. After being a dean of studies,</u> (then you become) a vice principal. Then you work with the experienced principal, your difficulty will reduce to half. Because as long as he (the experienced principal) is willing to <u>mentor you</u>, naturally you will succeed, like apprenticeship. Why it’s difficult for me? Because I have never been a vice principal. I became principal directly from dean of studies. In other words, I was in	“那么从教师到校长的转化，有的人不很困难，有的人比较困难，我是属于比较困难。原因在什么地方呢？他不是和人的聪明才干有关，它和人的经历有关，就是说，一个校长最好他能够一级一级做上来，从比如说，年级组长，教研组长，底层干部，做到中层干部。教导主任做完了，然后做到副校长，跟有经验的校长做几年，一半困难就很小了，因为只要他肯教你肯带你，那么自然的，也就是师徒一样的就带出来了。那么我说为什么我这个

	Decision making	the mid-administrative level. And they are the implementer instead of the decision maker. I am at the implementation level, therefore I am not involved in decision making. Suddenly I need to make decision as a the leader of the school, then it became difficult"—Principal G (p. 65)	困难呢？因为我没有当过副校长，我是从教导主任直接当正校长了，换句话说我在中层，而中层不是决策层，是操作层。但我在操作层，所以我没有决策参与，突然要我决策，而且做一把手决策，那么就有一定难度了。" – Principal G (p. 65)
Coping strategies	Managerial task Stress, Insufficient training Learning Ambiguity in tasks Coping strategy Principal's role	"I was asked to be in charge of the finance. The financial charts made me feel dizzy. Nobody has ever trained us. I don't need to be trained as a professional but I want to understand the basics. Every month I signed different papers but I didn't understand what the money were divided into. I mostly delegated the responsibility to the auditors and I didn't have enough time to take a close look at it. But as the legal representative of the school, I need to take all the responsibility if something went wrong. It was very stressful for me" – Principal I (p. 99)	"我说你让我管财务，一张表，看得我晕晕糊糊，也没有人专门给我们培训。 我也不要求把我培训成财务专家，但是大概我是要了解得。每个月我都要签很多字，但这些经费怎样划分我也不了解。这些我主要交给会计，我也没有时间细看。但是作为学校法人，出了事呢，还是我们承担责任。" – Principal I (p. 99)