

**A Review of Educational Leadership in the Chinese Compulsory Schooling
System and Leadership Framework for Improvement**

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Abstract

The Chinese compulsory schooling system plays a fundamental role in developing students' academic and social outcomes to lead successful lives. Successful schools require influential leaders. However, it is unclear what competencies principals in the Chinese compulsory schooling system require to become successful in improving the quality of schooling. The purpose of this research is to conduct a systematic review of research on educational leadership in China and propose a culturally appropriate educational leadership framework suitable for Chinese educational leaders.

A systematic review of 13 peer-reviewed empirical studies written in Mandarin on educational leadership in China revealed that current academic research has examined eight leadership styles from Western paradigms and evaluated their effectiveness in a Chinese context. The review found that Chinese principals' transformational and distributed leadership practices improved teachers' organisational commitment. School leaders' social and emotional competencies also played a moderating role in enhancing teachers' well-being. Areas of educational leadership research in China that have not been given due consideration were discovered, such as the lack of concern for the role of the Communist Party of China on the principal's leadership style, the influence of Confucian culture, or strategies for extending the professional skills or expertise of Chinese principals.

An analysis of three educational leadership frameworks was conducted to develop a charter or set of principal guides for school leaders within a Chinese context. The three frameworks included the *Competency Framework for Southeast Asian School Heads for Southeast Asian Countries*, the *New Zealand Educational Leadership Capability Framework*, and the *Australian Professional Standard for Principals and the Leadership Profiles*. These guidelines from other jurisdictions were studied and aligned with the empirical literature to produce a set of culturally appropriate guidelines for Chinese schools. The educational leadership framework developed within this research comprises five standard competencies: strategic planning and implementation, stakeholder management and engagement, promoting a learner-centred environment, emotional intelligence and communication skills, and resource sharing and management. In addition, two additional competencies that a Chinese educational leader

requires are high moral and ethical competence and an understanding of the influence of Confucius's culture within China's educational context. This research concludes with a presentation of both English and Chinese versions of the educational leadership framework for Chinese principals working in the compulsory schooling system to assist Chinese educational leaders in their future work.

Keywords: Educational leadership, Chinese compulsory schooling system, Leadership framework

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Chapter 1: Introduction

1.1 Motivation for the Study

Being Chinese, I received my kindergarten, primary, middle school and high school education in China before the age of 17. I have lived abroad for over six years and completed my bachelor's degree in New Zealand. Because of my experiences, I often consider my education in China and New Zealand, primarily the Chinese compulsory schooling system that began in 1986 when the Compulsory Education Law of the People's Republic of China was promulgated (China Government, 2019). This is because the compulsory schooling system plays a fundamental role in students' health, well-being and development for their future lives, and considerable weight is given to academic success in Chinese society. To make the Chinese compulsory schooling system run effectively, understanding what educational leadership practices are suitable for the Chinese context is essential. Many countries, such as New Zealand and Australia, have developed educational leadership frameworks as a support and training guide for developing educational leaders. However, it seems China has not yet developed such an educational leadership framework within the Chinese compulsory schooling system. Is it valuable to create an educational framework for the mandatory Chinese schooling system? I believe this is necessary.

Moreover, many public Chinese schools are located in low socioeconomic regions in China. The principals in these areas are likely not to have the same educational level or knowledge as principals in urban areas. Because of this, these principals may not have developed a clear understanding of effective educational leadership practices. Developing an educational leadership framework based on research that serves as a guide can help principals learn how to adapt their leadership practice quickly. This was an important motivator for me when conducting this study. From analysing the Chinese research literature and principal leadership frameworks from New Zealand, Australia and the Association of Southeast Asian Nations (ASEAN), I have constructed a valuable tool for leaders in Chinese schools and Chinese Communist Party (CCP) officials responsible for developing principals.

1.2 Problem Statement: Educational Leadership in the Chinese School Context

In the Chinese school context, educational leaders are selected by the local education bureau. An essential aspect of the leader's appointment is that the CCP at the upper level controls the appointment of school leaders. This means that educational leaders such as school principals are often a member of the CCP. The branch secretary of the CCP plays a vital role in the core decision-making unit in China (Lai et al., 2017). The school principal is often the vice branch secretary of the CCP in the school, and the branch secretary leads school principals. Educational leaders in China are expected to be responsible for everything in the school, such as finances, recruitment, staffing, food security, and pupil safety, and must report to the proper government officials regarding the school's success. If schools face problems such as severe disruption or mismanagement, upper government officials have the power to remove principals (Lai et al., 2017).

The decision-making process for who becomes a school principal relies on decisions by the CCP local secretary. The decision process is very subjective as it occurs in an internal conference between members of the CCP. The problem with this process is that there is no formal standard or system for the CCP in different cities or regions. This means that the criteria for selecting educational leaders can be variable from region to region. Moreover, the Chinese culture has many hierarchical power structures, and the Chinese accept unequal power distribution in organisations (FikretPasa, 2000). School principals use management methods such as directly controlling, supervising and monitoring teaching practice (Smith & Andrews, 1989). However, there is no suitable educational framework for school principals' professional development and training. Therefore, this is a practical problem for educational leadership in the Chinese compulsory schooling system because there are many variations in how school leaders enact their power.

A review of the research on educational leadership in the Chinese context revealed significant research gaps that have not been well addressed. The first gap is that current research in China mainly focuses on leadership styles instead of leaders' competencies. The term leadership style means the practices adopted by a leader to direct organisations (Rowitz, 2014). This includes how leaders implement plans and programmes and motivate their employees to work toward their goals (Rowitz, 2014). Popular leadership styles in management and organisational studies

include Theory X and Theory Y¹ (Rowitz, 2014). Other leadership styles include a situational leadership style, autocratic leadership style, democratic style and laissez-faire style (Rowitz, 2014). In China, leadership styles discussed in the education literature are transformational leadership, authentic leadership, transactional leadership, distributed leadership, shared leadership, servant leadership, caring leadership and instructional leadership (Hou, 2018; Jiang & Li, 2020; Mao et al., 2017; Tian et al., 2021a; Tian et al., 2021b; Wang et al., 2020). However, little research in the Chinese context discusses leaders' competencies such as strategic thinking and communications skills.

Secondly, government organisations in Australia, New Zealand and the ASEAN have consulted widely about the required competencies for effective school leadership. However, there is no research or policy in the Chinese context that parallels this type of development or a framework that could support Chinese school principals.

Thirdly, there have been no systematic reviews on educational leadership in China. An essential advantage of a systematic review is that it can help eliminate potential bias and uncover the truth of educational leadership (Bearman et al., 2012). Moreover, it can help generalise research findings by covering all valuable research related to a particular topic (Mulrow & Cook, 1998). The knowledge production and research in the field of educational leadership and management in Asia, has mostly derived from West Asia, South Asia and East Asia. Publications from Hong Kong take up about 32% of total 478 articles in educational leadership research from 1995 to 2012 (Hallinger & Chen, 2015). Empirical studies are the most popular research and make up about 72 % of the total research articles. The theoretical papers take up about 21% and the remaining 7% are reviews on educational leadership that are not the empirical studies. Publication topics include leadership in K-12 schools (14.2%), leadership change and its effect on school improvement (12.6 %) In addition, 10.7% of the research explains the importance of cultural context on leadership effectiveness and 9.4% discusses leadership in higher education. Other topics related to educational leadership include

¹ Theory X holds a pessimistic view of employees and assumes employees are unmotivated and dislike work, and that leaders should control, supervise and use authority styles to direct followers to achieve goals. Theory Y holds a positive view of employees and assumes that employees take initiative at work and are self-motivated. Theory Y uses a decentralised and participative management style to lead followers.

organisational behavior (8.4%), governance (7.5%), human resource development (6.3%), curriculum and teaching (4.8%), and principals (4.4%) (Hallinger & Chen, 2015). The research literature in the field of educational leadership shows that there is a trend to privilege the publication of studies written in the English language and a marginalisation of educational leadership research written in other languages. This study seeks to address this research gap by reviewing Chinese language literature on educational leadership in China.

1.3 Aims and Scope of the Study

This research had two aims. The first aim was to conduct a systematic review of research written in Mandarin on educational leadership in China to identify gaps in evidence. This review could then support and propose directions for future research on educational leadership in China. The second research aim was to develop a culturally appropriate educational leadership framework suitable for Chinese educational leaders and the Chinese context based on a comparative study of educational leadership frameworks from New Zealand, Australia and the ASEAN.

The scope of the systematic review focuses on empirical studies relevant to Chinese educational leadership from the Chinese Social Sciences Citation Index (CSSCI) database. It does not consider the English-language articles conducted about the Chinese context due to limited time. Several criteria were developed to exclude irrelevant articles. The first step was determining if the research titles were relevant to developing a Chinese educational leadership framework. The second step was checking whether the studies were empirical and excluding on-empirical studies. In addition, no time limitation was set for the empirical studies. In total, 13 Chinese research articles on educational leadership were identified. Of the 13 articles, 12 used survey methods to collect numeric data and adopted quantitative approaches when analysing data. One empirical study used a qualitative method to collect the data. The earliest empirical research on education leadership in Mandarin was traced to Li et al. (2016), who explored the effectiveness of instructional leadership in China's compulsory school settings. This illustrates that educational leadership research has not received much attention from Chinese academic researchers and this research topic is in its infancy in China.

1.4 Overview of the Study

This dissertation comprises six chapters.

Chapter 1 is the introduction and explains the motivation for the study and the problems associated with educational leadership in the Chinese context. The aims and scope of the study are also stated.

Chapter 2 describes the literature on educational leadership in the Chinese compulsory schooling system. The review discusses leadership and its features, summarises the context of the Chinese compulsory schooling system, current educational leadership in China and the school administration system, and lists the problems and challenges for educational leadership in China.

Chapter 3 describes the research methodology for the systematic review.

Chapter 4 is the systematic review of the empirical literature on educational leadership in China. This chapter analyses the research characteristics of the Chinese articles on educational leadership, the leadership styles and measurement scales in Chinese articles on educational leadership within the current literature, the effect of leadership styles on improvement, and discusses knowledge gaps in the recent existing studies on leadership styles in China.

Chapter 5 describes the development of a culturally appropriate educational leadership framework for educational leaders in China. It discusses the rationale for selecting the educational leadership frameworks from New Zealand, Australia and the ASEAN. It proposes a final educational leadership framework in English and Mandarin, drawing on findings from the literature for use in the Chinese compulsory schooling system.

Chapter 6 is the conclusion chapter and summarises the research findings, details the limitations in this research, and provides suggestions for future research.

Chapter 2: The Chinese Education Context and Influencing Factors on School Leadership

2.1 Introduction

This chapter focuses on educational leadership and the influencing factors in the Chinese compulsory schooling system. This chapter has six sections. Section 2.1 is the chapter introduction. Section 2.2 defines leadership and analyses its features. Section 2.3 discusses the leadership and leadership development in educational settings. Section 2.4 discusses educational leadership in China from English-language literature. Section 2.5 analyses the context of the Chinese compulsory schooling system. Section 2.6 analyses the current educational leadership in China and the school administration system. Section 2.7 focuses on the problems and challenges for educational leadership in China's compulsory schooling system, and Section 2.8 is the chapter summary.

2.2 Definitions of leadership and its features

The definition of leadership varies depending on the researcher and the context. Leadership is a dynamic interaction among groups and individuals within an organisation. A leader in a team could be an agent to promote transformative practice (Van Oord, 2013), emphasise empowerment and motivate followers to achieve goals. An essential difference between management and leadership is that management focuses on completing corporate objectives such as profit and market share. However, leadership focuses more on achieving human participation and social change and the ultimate goal of the human community (Foster, 1989).

Van Oord (2013) proposed three essential features of leadership. The first feature Van Oord noted is the use of social interaction to influence others. Van Oord defined leadership as a dynamic interaction among different groups and individuals within and outside an organisation. Another definition from Watson and Scribner (2007) suggests that leadership can be the process and product of social interaction influencing purposive human action. Both definitions indicate the importance of social interaction as an essential characteristic of leadership, and such dynamic interaction requires leaders to interact and communicate with others.

The second feature is that leaders rely on their positional or personal power for leadership. Previous studies suggest two power sources—positional and personal. Positional power comes

from formal authority and position, typically providing an opportunity to control resources and reward or punish employees. Such positional power influences others based on compliance, coercion or incentives (Yukl, 1998). Personal power is related to the expertise of individuals, loyalty, friendship or personal charisma. This power is based on personal reputation and knowledge and influences others through trust and respect (Yukl, 1998). Therefore, understanding how positional or personal power plays out in the context of school leadership is essential.

The third feature of leadership is leading employees to achieve organisational goals. The ultimate task of leadership is to achieve organisational goals. Yukl (1998) indicates that leaders should set strategies and objectives and motivate followers to achieve those objectives. Helland and Winston (2005) also note that leadership requires leaders to generate organisational vision and values and encourage employees to achieve organisational goals (Helland & Winston, 2005).

These three leadership features have several differences that can impact leadership success, depending on how individual leaders employ these characteristics or practices. Leaders could use social interaction to lead followers or adopt soft power such as expertise and charisma to lead others (Puni et al., 2021). However, when leaders use positional power to influence followers to complete their tasks, followers can have a lower level of commitment to organisations and teams. Understanding the differences in these leadership styles is essential for any organisation (Hulpia et al., 2009). If leaders only use their positional power to make others obey them, they cannot receive authentic support from their followers, which may impact their work outcomes. Leadership practices must be enacted to enable followers to understand organisational goals so they can be committed to them and the required tasks (Young & Dulewicz, 2006). Understanding goals is essential as it supports employees in focusing their efforts in the right direction.

2.3 Review on leadership and leadership development in educational settings

In sum, leadership and leadership development in educational settings is important for any school. This is because there are growing responsibilities for school leaders who want to better

manage their schools (Hitt & Tucker, 2016). This section provides a short historical review of the leadership styles and models that have dominated the field of educational leadership.

Knowledge production in the field of educational leadership has mainly focused on various leadership models. According to Gumus et al. (2015), managerial leadership started from scientific management theory and was very popular from the early 1900s to 1950s. Then, in the 1960s and 1970s, scholars saw instructional leadership as necessary for an effective school principal. Instructional leadership emphasizes developing school climate, instructional programmes and the school's mission to encourage teachers' development (Hallinger, 2003). It also focuses on developing the curriculum and improving both the teaching and the learning of students (Marks & Printy, 2003).

By the 1980s, situational, transformational and distributed leadership were increasingly discussed in educational settings. Situational leadership perceives the school context as an important factor impacting school effectiveness. It holds that situational factors such as task structure, hierarchy, power relations and others can highly impact leadership effectiveness (Bossert et al., 1982; Bass & Riggio, 2006). Different from the above two types of leadership, transformational focuses on building a higher level of commitment to school to promote effort and productivity (Bass & Avolio, 1994). This is achieved by a leader focusing on individual support, goal sharing among teachers, intellectual stimulation, setting high expectations, and value building and commitment (Leithwood & Jantzi, 1999). The final leadership style, distributed leadership, ignores the hierarchical design of leadership and encourages all personnel to participate in making decisions, and encourages collaboration between colleagues (Spillane, 2005).

Since the 1980s, the international educational leadership literature has been focused on collaboration and organisational learning. Leadership for learning has been accepted by researchers as combining different leadership theories such as situational leadership, instructional leadership, transformational leadership and distributed leadership (Murphy, Elliott, Goldring & Porter, 2007). The goal of leadership for learning is to lead schools with a focus on learning for student achievement (Daniëls et al., 2019). There are several features of leadership for learning. The first is the wide source for leadership that not only focuses on principals but also includes

other school members. The second is about establishing a learning system that includes learning for students, teacher, leaders and other members. The third feature is improving collective efficacy to encourage team cooperation among teachers and leaders and emphasizing the relationship between school leadership and the school context (Daniëls et al., 2019). Shengnan and Hallinger (2018) demonstrate in their research findings the effectiveness of learning-centred leadership for improving the professional learning of teachers in China. This style of learning-centred leadership has features such as vision enactment, learning support for teachers, managing the learning programme and role modelling (Shengnan & Hallinger, 2018). However, as the systematic review of the Chinese language literature on educational leadership will show, nearly none of the literature dealt with learning-centred leadership. Rather, the bulk of the Chinese language academic literature focused on leadership styles and models that were dominant in the international literature on educational leadership in the 1980s.

2.4 Review of English-language literature on educational leadership in China

In contrast, the limited English-language literature on educational leadership in China mainly focuses on instructional leadership and learning-centred leadership. Wang (2016) conducted a case study of two senior high schools in China and found that principals prefer deploying instructional leadership practices. This type of leadership is useful for achieving a shared vision, shaping cultural trust, and supporting school learning (Wang, 2016). Shengnan and Hallinger (2018) found that learning-centred leadership is mediated by two variables, namely teacher trust and teacher agency--- a sense of belongingness to an organisation. Particularly for teachers from rural areas, a lower level of teacher trust and agency translated into a lower level of professional learning.

Shengnan and Hallinger (2021) sampled 1194 teachers from 64 primary and middle schools in China. Their research shows that instructional leadership practices can impact teacher professional learning directly and indirectly, and encourages teachers' formal and informal learning in both rural and urban areas (Shengnan & Hallinger, 2021). Despite the fact that hierarchy is the norm in the Chinese cultural context, principals that adopt collaborative leadership practices are more effective at achieving their goals.

Another important finding from the English-language literature on educational leadership in China is the important influence of culture, gender and contextual factors on educational leadership in the country. Law (2013) indicated that culture and gender play an important role in Chinese school leadership. Traditional gender stereotypes are evident in school leadership in China where males have superiority over females. Compared to male leaders, female leaders have to challenge stereotypical discrimination in the male-dominated Chinese culture. Therefore, they show a higher tendency for cross-gender adjustment in school leadership. Female school leaders also tend to show high cooperative-collectivist orientation and democratic decision-making (Law, 2013). This indicates that it is important to consider influence of culture, gender and contextual factors on educational leadership in China.

2.5 The Context of the Chinese compulsory schooling system

Compulsory education in China began in 1986 when the Compulsory Education Law of the People's Republic of China was promulgated. The Compulsory Education Law aimed to improve the nation's literacy and required that all children receive compulsory education. According to the Ministry of Education of the People's Republic of China (2022), in 2021, 207,200 schools were providing compulsory education to students nationwide. This data clearly shows the scale of the Chinese compulsory schooling system and the number of school leaders and principals required to lead such a large number of schools. The Chinese Government invests significant resources in the Chinese compulsory schooling system to support its development. As a whole, since 2012, China's government expenditure on education has remained above 4% of GDP for 10 consecutive years, effectively ensuring and pushing China's overall educational development level into the middle and top ranks in the world (China Youth Daily, 2022).

2.6 Current Educational Leadership in China and the School Administration System

Despite resources dedicated to the compulsory school system, the current educational leadership practices employed by school principals in China are still characterised by the use of positional power to influence followers and teachers. This means that principals often use their positional ability to control or supervise others in daily practice to achieve their goals (Yukl, 1998). This statement can be supported by empirical research from Lai et al. (2017), who

studied educational leadership in two secondary schools in Beijing. Lai et al. found that the principals of both schools adopted a traditional top-down leadership approach (Smith & Andrews, 1989). This educational leadership approach often requires the school principal to manage the curriculum and instruction, and directly control, supervise and monitor teaching practice (Smith & Andrews, 1989). The two principals from the two Chinese schools were proud of directly giving instructions to teachers after observing their classes (Lai et al., 2017). This case study indicates that principals have developed values or beliefs of controlling and influencing others.

The fundamental reason for adopting the traditional top-down instructional leadership approach in Chinese schools is related to the unique Chinese culture and values, which profoundly influence the education system and its leaders. According to Hofstede (2001), a country's culture can be explained by several cultural dimensions such as power distance, individualism, uncertainty avoidance and long-term orientation. Unlike Western cultures, Chinese culture scores highly in power distance² and shows a collectivist culture³. The high-power distance score indicates that Chinese citizens accept unequal power distribution in their organisations (FikretPasa, 2000). This means that the polarisation of subordinate-superior relationships and defensive behaviour against power is less observed among Chinese and that followers are often influenced by formal power and authority.

Moreover, Chinese people are influenced by collectivism, which means that they often act in the group's interests instead of considering themselves (FikretPasa, 2000). The collectivism and high-power distance of Chinese culture means that Chinese teachers and parents follow and rarely challenge organisational leaders such as principals, whom they understand as making

²Power distance refers to the extent to which less powerful members of organizations and institutions (including the family) accept and expect unequal power distributions. This dimension is measured not only from the perspective of the leaders who hold power, but also the followers' perspectives.

³The individualism-collectivism dimension relates to a societal characteristic and not at an individual level. It identifies the extent to which people in a society are integrated into groups. In an individualist society, there is an expectation that individuals look after themselves and connections between individuals are loose; while in a collectivist society, individuals are integrated into strong cohesive groups, which may often involve extended family.

<https://www.asha.org/practice-portal/professional-issues/cultural-competence/examples-of-cultural-dimensions/>

decisions for the collective good of the school and acting not in their own interests (Ho & Tikly, 2012). This essential cultural context supports our understanding of why a top-down instructional leadership approach in China is well supported.

The school administration system is another significant influence on the leadership practices of Chinese principals. Unlike European or American schools, where districts and boards have some authority over the resourcing and direction setting of schools, the Chinese compulsory schooling system follows a principal responsibility approach. This centrally controlled system through the CCP means that the principal is responsible for everything in the school, such as finance, recruitment, staffing, food security, and pupil safety. Furthermore, school principals are accountable to the CCP. When problems occur, the principal can be found guilty of mismanagement and be held responsible for such problems. High-ranking government officials have the power to remove principals from their employment in situations where severe disruption or mismanagement occurs. Therefore, it is understandable that Chinese principals make all critical decisions in the school, which in turn can strongly influence teachers' professional lives (Lai et al., 2017).

2.7 Problems and Challenges for Educational Leadership in China's Compulsory Schooling System

2.7.1 Unequal resource distribution among schools

There are several challenges or problems with the Chinese compulsory schooling system, and a fundamental issue is the inequality of resource distribution among different regions. This inequality significantly impacts school development and student achievement in poorer rural areas. For example, Tian et al. (2021a) noted the inequalities regarding the availability of tangible and intangible resources between rural and urban compulsory schools and that resources are not distributed equally. Tian et al. (2021a) further noted that tangible and intangible resources such as computer and multimedia equipment, wireless internet connections, books, and teachers are essential factors affecting the quality of education. It has been shown that schools with more resources have higher levels of student achievement regardless of the type of school (Luo, 2022). However, resource allocation appears to more significantly impact student performance in middle schools compared to primary schools. In addition, Luo (2022) also notes that compared to urban schools, rural primary and middle

schools face problems using online education resources when students wish to study afterschool. Luo's study showed that few students participate in online education after school because it is not compulsory. Because of this, very few online education resources are made available to rural students. In addition, many education platforms require additional fees and are not funded by the local government (Luo, 2022).

Fan and Wu (2014) collected data from eight western, middle and eastern Chinese provinces. In the eight provinces, there were fewer teachers in county-level compulsory schools than in town-level schools. Moreover, there was a lower government financial investment in rural compulsory schools than in urban regions. Fan and Wu (2014) found that government expenditure on teachers' salaries was higher in the east and middle regions compared to the western region and higher in urban schools compared to rural schools. The issue of urban and rural education, especially the distribution of resources, is yet to be addressed. Urban and high-quality schools occupy more human resources than rural schools (Li et al., 2016). Therefore, educational leaders face the problem of unequal resource distribution among schools and it is important to adopt appropriate leadership styles to resolve this issue.

2.7.2 Low teacher work satisfaction, primarily due to low salaries

Another fundamental challenge in the Chinese compulsory schooling system is the low level of teacher satisfaction. Teachers' job satisfaction is an essential factor that impacts their teaching quality. A recent survey by Yu and Liu (2021) investigated teacher satisfaction within the compulsory education system in seven counties in Ningxia province. The data revealed that many teachers were unsatisfied with their career development opportunities after being in the compulsory education system. Among the 2,895 teachers, 42.25% were unsatisfied with their career development opportunities, and 12.64% were highly unsatisfied. This means that 54.89% of teachers in the Chinese compulsory schooling system were unsatisfied. In addition to career development opportunities, 43.87% of teachers were unsatisfied with the current school conditions and their job salaries, and 11.74% were dissatisfied (Yu & Liu, 2021).

Similarly, Tan et al. (2017) surveyed 124 teachers in China's Sichuan province. The results revealed that 54.83% of teachers were not satisfied with their future career development opportunities, and only 15.32% were satisfied with their career development. In addition, 81.45%

of primary and secondary school teachers were dissatisfied with their salary and career promotion. Of the surveyed participants, 35.48% strongly desired to leave their job due to low salaries and income (Tan et al., 2017). In 2013, the proportion of education expenses used for teachers' welfare and salary in China's primary, middle and high schools was 64.3%, 60.2% and 53.6%, respectively, of the overall budget. However, in comparison, the proportion of education expenses used for teachers' welfare and salary in Japan in 2015 were 67.9%, 67.3%, and 69.3%, respectively (Yu & Liu, 2021). This means that compared to many Western countries, there is a lower percentage of expenditure on teachers' salaries in China and this is an important factor in teachers' poor work satisfaction.

2.7.3 The challenge of information technology and artificial intelligence education in China

With the development of information technology (IT) and artificial intelligence (AI) education in China, IT and AI education has become a focus in China's compulsory education sector. In 2017, the State Council of China (2017) issued the *New Generation Artificial Intelligence Development Plan*. The plan clearly articulates that artificial intelligence has become the new focus of international competition. Launching AI curriculum education projects across the nation is essential, alongside setting up artificial intelligence-related courses and gradually promoting computer programming education in primary and middle schools. In April 2018, the Ministry of Education in China issued the *Action Plan for Artificial Intelligence Innovation in Colleges and Universities*, requiring the introduction of AI in primary and secondary schools (The Ministry of Education in China, 2018).

One problem with implementing this action plan is the availability of computer equipment for students. According to Liu et al. (2018), the ratio of students per computer was 4:1 in 2000 in the United States. This means that every four students in the United States had one computer in 2000. In Britain's primary schools, every nine students had one computer in 2000. However, the situation is complicated in China. According to Liu et al. (2018), the ratio of students per computer was 11:1 for primary and 7:1 for middle school students in 2016. In addition, a survey from Fan and Wu (2014) of eight provinces in China shows that in one western province, about eight students have one computer; however, on average, 30 students in rural compulsory schools had one computer. About four students in one province in Middle China

had one computer, but 80 students had one computer in a rural region in 2017. This means that computer accessibility in China's compulsory education is inferior, especially in rural areas. This lack of material resources challenges principals to establish IT and AI education in primary and middle schools. Another challenge for school leaders and teachers is inexperienced teaching and no explicit curriculum and courses for IT and AI education for primary and middle school students. The teaching courses in China mainly focus on basic IT knowledge, such as how to use software. Teachers seldom encourage students to explore in-depth AI education based on their interests (Liu et al., 2018). There are other problems with AI education, such as poor quality AI textbooks, lack of AI teachers or ethical training on AI education (Zhang et al., 2020). Therefore, this is a fundamental challenge for future educational leadership in China's compulsory schooling system.

2.7.4 The barrier to quality-oriented education in China due to the focus on examination-oriented education

Another critical challenge or problem for the Chinese compulsory schooling system is the barrier to quality-oriented education in China. In the 1990s, the concept of quality-oriented education (Suzhi education 素质教育) was proposed by the Chinese Government. This concept aims to encourage a student's creative spirit and ability, rather than the centuries-old tradition in China of teaching for examination and learning for examination (China Net, 2003). The meaning of quality-oriented education is to foster students' morality (道德), intellect (智力), physical health (健康体魄), artistic attainment (美), and hard work (热爱劳动) (State Council of the Chinese Central Government, 1999). The State Council has enacted the *Decision on the Deepening of Educational Reform* and the *Full Promotion of Quality-Oriented Education* over the previous 20 years. It requires that all the primary and middle schools enhance quality-oriented education from urban to rural compulsory schools in China (State Council of the Chinese Central Government, 1999). The Chinese Government has enacted many regulations or policies to promote this more extended curriculum. The main barrier is that Chinese parents still want a higher examination score for their children to gain entrance into top universities. The exam-oriented national college entrance test means principals and teachers focus on ensuring students gain high academic grades.

The national entrance examination is an important policy that drives China's education system. All high school students must pass the national entrance examination to complete their college or postgraduate education. This national entrance examination tests students in six subjects. Three subjects are mandatory, which are Chinese Mandarin, mathematics and English. Students have the choice to determine the remaining three subjects. Students can select from history, geography and politics, or physics, chemicals and biology (Yang, 2018). The national entrance examination is highly competitive. In 1990, over 28.3 million students took the national entrance examination. However, this increased to 10.10 million in 2007, and in 2020, 10.78 million students took part in the national entrance examination (Net Ease, 2021).

Over 70% of Chinese students have the opportunity to enter tertiary education. However, only about 12% of students can have this opportunity of entering A-rated universities (Sohu Education, 2022). Chinese parents are also willing to spend more time and money on their children's education to gain high examination scores. Parents do this by purchasing private tuition for their children after school and during school holidays. This investment is considered necessary because a higher score means their child has a better chance of attending an A-rated university. In addition, many public and private schools often recruit excellent teachers from other schools to attract students from affluent and influential families and to raise their students' examination results (Yang, 2018). Under such a situation, these schools can charge a higher fee each year, and many parents are willing to send their children to those schools.

Moreover, private supplementary tutoring centres in many big cities such as Beijing and Shanghai, are equipped with the best teaching faculties (Wei & Bray, 2015). Some private supplementary tutoring centres are even listed in the security markets, such as New Oriental and XRS on Nasdaq (Liu & Zhao, 2019). Therefore, as parents are examination-oriented and care deeply about their children's scores, it is difficult for Chinese principals to widen the curriculum and enhance quality-oriented education in their schools. That is an important challenge for educational leadership to address.

2.8 Chapter Summary

This chapter described the context of educational leadership in China. Understanding leadership concepts and how they are applied in a Chinese context is required in order to

develop an educational leadership framework for China's compulsory educational context. Section 2.2 defined leadership as a dynamic interaction among groups and individuals within an organisation. Leadership has three features: using social interaction to influence others, using positional power for leadership, and leading employees to achieve organisational goals. These characteristics will be used to conduct the systematic review of the empirical literature on educational leadership in China in Chapter 4. Moreover, knowing these leadership features will help develop the educational leadership framework by considering the various leadership competencies.

Understanding the Chinese compulsory schooling context helps identify leadership challenges. Nine-year compulsory education in China began in 1986 after the Compulsory Education Law of the People's Republic of China was enacted. Over the previous 20 years, China's compulsory schooling system had experienced fast growth within an extensive school network. Improving the sector was a significant undertaking for any government and school leaders would be crucial in driving the required changes.

Section 2.4 discussed that educational leadership in China primarily uses positional power to influence followers and teachers, and principals have developed values or beliefs of controlling others. This is understandable given the Chinese high-power distance culture alongside a collectivist culture. In addition, the Chinese compulsory schooling system has a principal responsible approach, meaning the principal is responsible for everything in the school. However, the CCP controls schools, and the CCP ensures that principals carry out their roles responsibly. Understanding these features of educational administration systems in China is essential for developing an educational framework, as the framework must consider all these factors and is different from the Western educational leadership paradigm.

Section 2.5 indicated several challenges within the Chinese compulsory schooling system. These problems include unequal resource distribution among schools, teachers' poor work satisfaction, low salaries, the challenge of delivering effective IT and AI education, and the barrier to quality-oriented education in China due to an examination-oriented focus.

Chapter 3: Methodology

3.1 Introduction

Empirical research written in Mandarin investigating the current state of educational leadership in the Chinese compulsory schooling system was reviewed to develop an educational leadership framework suitable for school leaders and principals in China. Two aims were proposed to achieve this. The first research aim was to investigate what is known about educational leadership in China and where gaps exist in the evidence by using a systematic review. Results from this investigation would help provide new research directions for educational leadership in China. The second research aim was to develop a culturally appropriate educational leadership framework suitable for Chinese educational leaders and the Chinese context based on a comparative study of educational leadership frameworks from New Zealand, Australia, and the ASEAN.

This chapter discusses the research methodology used for achieving the research aims. Section 3.1 provides an introduction to presents a chapter outline. Section 3.2 discusses the rationale for selecting a systematic review, and explains the systematic review process and its differences from a narrative literature review.

Section 3.3 presents the research design. This includes defining the eligibility criteria for Chinese empirical studies on Chinese educational leadership, the literature search process, screening and quality assessment, and the risk of bias in the systematic review. Section 3.4 explains the concepts related to the statistics used in this research, such as beta coefficient, correlation coefficient and R-squared. Finally, Section 3.5 summarises this chapter.

3.2 Why use a Systematic Review?

3.2.1 Definition and steps of systematic review

Systematic reviews have received closer attention in recent years and are different from narrative literature reviews. First, in terms of goals, a systematic review aims to answer a research question fully and eliminate potential bias (Khan et al., 2003). It aims to synthesise the literature (Bryman, 2012), whereas a narrative literature review summarises a topic or provides an overview (Kysh, 2013). The second difference is in terms of components. Key components of a systematic review include pre-specified eligibility criteria, a systematic search strategy, an

evaluation of research validity and reliability, synthesis and interpretation of findings, and references for the review. However, a narrative literature review includes an introduction, methods, discussion, conclusion, and references (Khan et al., 2003; Kysh, 2013). The third key difference is the requirements. A systematic review requires synthesising knowledge of the research topic and searching all relevant online and print sources. However, a narrative literature review requires researchers to understand a research topic and search selected databases, but does not require a thorough search and synthesis (Bearman et al., 2012; Khan et al., 2003). A systematic review is “a replicable, scientific, and transparent process that minimises bias through exhaustive literature searches of published and unpublished studies and provides an audit trail of the reviewer’s decisions, procedures, and conclusions” (Khan et al., 2003, p.209). It aims to achieve a comprehensive and unbiased synthesis of collected studies to produce one single publication on the topic (Khan et al., 2003).

The systematic review process can vary but usually includes the following steps as suggested by Bryman (2012) (see Table 1). The first step is defining the scope and purpose of the review. This requires the researcher to devise precise research questions. These research questions help suggest keywords for later steps (Bryman, 2012). The research question must be unambiguous. Once it is defined, it should not be changed unless the change is justified (Aromataris & Pearson, 2014; Khan et al., 2003).

Table 1. Steps for a systematic review (Bryman, 2012).

Step	Name
1	Defining the scope and purpose of the review
2	Search relevant studies related to this review topic
3	Relevance assessment on each collected study for those research topic
4	Evaluation of quality of the collected studies
5	Extraction of the key finding from each study and synthesis of the results

The second step is to search for relevant studies related to the selected review topic. This requires developing keywords and terms suitable for the research purpose and questions in the first step. Keywords should relate to the research questions and should not exclude fundamental studies. This step also requires the researcher to clearly explain the search strategies so they can be easily replicated (Aromataris & Pearson, 2014). Search strategies

should be applied to peer-reviewed journals and other valuable sources that may not be peer-reviewed. Non-peer-reviewed journals are called grey literature and include sources such as conference papers or reports. During this step, many studies can be retrieved (Bryman, 2012). The rationale for exclusion or inclusion of studies should also be explained (Khanet al., 2003).

The third step is relevance assessment. This step aims to reduce the number of studies by only keeping relevant studies. This process requires analysing the research abstract and critical themes to assess relevance (Bryman, 2012).

The fourth step is the evaluation of the quality of the studies. This step requires researchers to design a set of quality criteria to examine research design, methods, sample, and other elements. Researchers must be mindful that some studies may not meet all criteria in this step, but may still be appropriate for review and consideration (Bryman, 2012).

The fifth step is the extraction of key findings from each study and synthesising the results. This is a complex step as it requires researchers to evaluate each study. In this step, researchers record essential information about each study. This includes sample size, data collection methods, sample location and critical findings for each study. This step may require a meta-analysis of those studies, producing summarised statistics for the collected studies (Bryman, 2012). It also requires exploring the heterogeneity and similarities of those studies to achieve better synthesis (Aromataris & Pearson, 2014).

3.2.2 The rationale for choosing a systematic review methodology

A systematic review can provide a more trustable and accountable review of a specific field. In addition, a systematic review clarifies what we know and how we know it from different ideological and theoretical positions (Gough, 2007, p.35). Thus; systematic review can help academic researchers better understand the research in a specific field and can contribute to a better and more thorough understanding of educational leadership in China. This is important for academic study and examining educational leadership in the Chinese compulsory schooling system.

A systematic review can also help eliminate potential bias and uncover current trends and ideas in educational leadership. Compared to a narrative literature review, a systematic review can minimise bias in the research process and help find the real issues and truth related to real problems (Bearman et al., 2012). A narrative literature review may only identify few aspects of the research to reach conclusions from the findings. Because of this, a narrative literature review may only cover one side of a topic. However, a systematic review has broad coverage of a relevant subject. The breadth of the search helps find the research truth and controls bias (Bearman et al., 2012).

Another benefit of utilising a systematic review for this research is that findings can be generalised. A systematic review covers all valuable research related to a particular topic (Mulrow & Cook, 1998), and this helps when generalising findings (Lacey & Gerrish, 2010). The generalisation of results is crucial for research as it helps establish a common understanding of a topic.

A systematic review can uncover new research directions by identifying potential inconsistencies and gaps in existing research. Inconsistency in findings can help generate fresh hypotheses and research directions (Bearman et al., 2012). For instance, the Ministry of Education of People's Republic of China (2017) recently found inconsistencies between government policy and practice. The Ministry of Education in China wanted to scrutinise the development of primary school principals' professional skills or expertise. However, current empirical research from Zeng et al. (2020), Wang and Zepeda (2017), Jiang and Li (2020) and Mao et al. (2017) suggests that the process of developing expertise or professional skills for Chinese primary school principals is not yet fully understood. Because of this inconsistency in policy and practice, a thorough systematic review and examination of the evidence is required at all levels of the Chinese education system before proceeding.

Systematic reviews support better decision-making. A systematic review synthesises relevant information (Mulrow & Cook, 1998) and provides unbiased findings (Lacey & Gerrish, 2010). This study used a systematic review to discover what leadership practices currently exist in Chinese schools and identify the competencies that might help principals become better leaders. The systematic review was used to determine the core competencies, which informed the

development of the leadership framework for the Chinese context. The Chinese educational leadership framework was designed to help academic officials, school principals, and other education professionals understand the competencies and skills required to lead a school effectively.

3.3 Research Design

3.3.1 Eligibility criteria for Chinese empirical studies on Chinese educational leadership

Criteria for selecting literature were developed. The first criterion was that the research article had to be written in Mandarin for a Chinese audience due to limited time for collecting English-language articles on Chinese educational leadership. The second criterion was that the peer-reviewed research article had to be published in CSSCI journals. The CSSCI database is a widely used academic citation index in China, covering over 2,700 academic journals in 25 social science categories with approximately 1 million articles (China Pharmaceutical University Library, 2021). CSSCI is perceived by Chinese academic researchers as an influential academic index in China and is widely accepted. The third criterion was that the research article had to study Chinese educational leadership in mainland China. Hong Kong and Taiwan were excluded because their education systems differ from mainland China and inclusion could skew the evidence. The fourth criterion was that the study needed to be empirical in nature. Empirical analysis is based on observed and measured phenomena and derives knowledge from experience rather than from theory or belief (PennStateUniversity, 2022, para.1). A critical feature of empirical analysis is its strictness in collecting either qualitative or quantitative data or both (Lasalle University, 2022).

3.3.2 Literature search process

3.3.2.1 The literature search process for Chinese empirical studies on Chinese educational leadership

I visited the CSSCI database to search for relevant empirical studies on Chinese educational leadership. The following terms were used when searching titles in the CSSCI database: principal leadership(校长领导力), teacher leadership(教师领导力), school leaders(学校领导力), Chinese educational leadership (中国教育领导力), Chinese school leaders (中国学校领导), core skills of principals (校长特质) and educational leadership framework(教育领导力框架). Detailed search results are presented in Table 2. In total, 35 articles contained the term

‘principal leadership’, 17 peer-reviewed articles contained the term ‘teacher leadership’, and eight peer-reviewed articles contained the term ‘school leaders’. One article contained the term ‘core skills of principals’. No articles were found for the other three terms of Chinese educational leadership, Chinese school leaders and educational leadership framework.

Table 2. Results of the peer-reviewed article search in the CSSCI database.

Term used	Search results for peer-reviewed articles
Principal leadership (校长领导力)	35
Teacher leadership (教师领导力)	17
School leaders (学校领导力)	8
Chinese educational leadership (中国教育领导力)	0
Chinese school leaders (中国学校领导)	0
Core skills of principals (校长特质)	1
Educational leadership framework (教育领导力框架)	0

3.3.3 Screening and quality assessment

Screening and quality assessment procedures were used for all studies. Based on Bryman (2012), a relevance assessment and evaluation of the quality of collected studies were completed. This process focused on examining the abstract and critical themes to assess their relevance. The research design, methods, sample size and other elements were also examined. The following steps were adopted to complete the screening and quality assessment.

The screening and quality assessment included two steps. The first step was to screen the titles to assess whether the research was highly relevant to the Chinese educational leadership framework. This step was completed manually. The second step was to check whether the studies collected from the CSSCI database were empirical. Non-empirical studies were excluded from the sample. A total of 13 empirical studies on Chinese educational leadership met two criteria and were selected for further systematic review.

3.3.4 Risk of bias

Research bias can impact the quality of research. According to Dwan et al. (2013), research bias involves factors that affect observations and conclusions and cause findings to deviate from the truth. If various biases impact a systematic review, inaccuracies can be introduced. The following biases were considered when conducting this research.

The first possible bias was reporting bias. Reporting bias involves the selective dissemination of research findings. Such bias can cause authors to selectively highlight research findings based on their intentions. A meaningful way to avoid research bias in systematic reviews is by setting criteria in advance, such as sample size, intervention and outcomes (Drucker et al., 2016). This research sufficiently disclosed all the relevant information related to the systematic review and thus avoided reporting bias.

The second possible bias was publication bias. According to Drucker et al. (2016), a systematic review should incorporate all relevant findings to explore the defined topic. This process requires collecting published research. However, the significant problem was that authors choose to report significant published findings. However, in non-significant published results, insignificant findings may be excluded (Dwan et al., 2013). Under such a situation, this would cause publication bias in a systematic review. I checked each empirical study by examining each contained significant findings and explored the insignificant findings related to the Chinese educational framework to avoid publication bias in this systematic review. This helped control publication bias in this research.

3.4 Explanation of Statistical Concepts

Many statistical results are presented in Chapter 4 when discussing the research evidence. Because of this, several statistical concepts are explained in this section to better assist in understanding those results.

The first concept is beta coefficient. A regression model, such as a simple linear regression or a multiple regression model, often calculates two types of regression coefficients. One is the beta coefficient, and the other is the intercept. The beta coefficient measures every unit change of the dependent variable to the independent variable. It can be either positive, negative or zero (Baran & Jones, 2016). If the beta coefficient is positive, this means a positive relationship between the independent variable contributing to the dependent variable (Baran & Jones, 2016).

However, if there is a negative relationship, then the independent variable contributes negatively to the dependent variable. Each beta coefficient has a p-value associated with it. The p-value checks whether the beta coefficient is significant at a certain confidence level, such as

95% or 99%. If the p-value is smaller than the significance level, this provides enough evidence for supporting use of the beta coefficient in the regression models (Baran & Jones, 2016).

The second concept is correlation coefficient. This measures the degree to which the movement of two variables are associated with each other. Generally speaking, the most popular correlation coefficient is the Pearson correlation coefficient, which tests for the strength of the association between two continuous variables. The value for the correlation coefficient can be from -1 to 1. A value of -1 means a perfect negative association between two variables, while a value of 1 means a perfect positive association between two variables (Salkind, 2010). Similar to the beta coefficient, for each correlation coefficient, there is a p-value associated with it. The p-value checks whether the correlation coefficient is significant at a certain confidence level. A p-value is often significant at the .05 level or .01 level. An absolute value of 0 means no association between the two variables. A general rule is that an absolute value of a correlation coefficient value from 0 to 0.2 means weak or no relationship; 0.2 to 0.4 represents a fragile relationship; 0.4 to 0.6 means a moderate relationship; 0.6 to 0.8 means a strong relationship; and a value above 0.8 means a solid relationship (Salkind, 2010).

The third concept is R-squared (R^2) or the coefficient of determination, which measures the proportion of variance in the dependent variable that the independent variable can explain in a regression model. It checks the fit and the degree of data fit in a regression model. The value of R-squared ranges from 0 to 1. A value of 0 means that the dependent variable cannot be explained by the variance of the independent variable, while 1 means that the dependent variable can be completely (100%) explained by the variance of the independent variable (Grove & Ciper, 2020). Therefore, a higher R-squared value means a better explanation of the variables to the regression model.

3.5 Chapter Summary

This chapter explained why a systematic review methodology was adopted instead of a narrative literature review. A systematic review can better answer a research question and eliminate potential bias. Moreover, it can also synthesise and uncover new research directions by identifying potential inconsistencies or gaps in existing research. In order to successfully

conduct a systematic review, two eligibility criteria were used when searching for Chinese empirical studies on Chinese educational leadership. The first was that the peer-reviewed research article in Chinese had to be published in CSSCI journals. The second was that the research article had to be empirical in nature. A total of 13 empirical articles were identified. This chapter also discussed possible biases and ways of minimising these. Finally, several statistical concepts such as beta coefficient, correlation coefficient and R-squared were explained.

Chapter 4: A Systematic Review of the Empirical Literature on Educational Leadership in China

4.1 Introduction

This chapter presents a systematic review of the empirical literature on educational leadership in China and discusses gaps in the literature. This chapter has eight sections. Section 4.1 is the introduction. Section 4.2 analyses the characteristics of the research reported in Chinese articles on educational leadership, such as the research methods, sample sizes, and research settings. Section 4.3 analyses the leadership styles discussed (including their Chinese terms) and the measurement scales used in the Chinese articles on educational leadership. Section 4.4 reviews leadership styles discussed in the literature that are known to improve teachers' well-being. Section 4.5 analyses the leadership styles known to strengthen teachers' commitment. Section 4.6 reviews the teachers' social and emotional competencies related to leadership styles. Section 4.7 discusses knowledge gaps in the current existing studies on leadership styles. Finally, Section 4.8 summarises the chapter.

4.2 Characteristics Regarding Chinese Educational Leadership

This section details the characteristics of educational leadership that have been published in Mandarin and Chinese academic journals. Table 3 presents the characteristics, including author and year of publication, sample size, participants and instruments used.

4.2.1 Research methods

The Chinese research articles on educational leadership mainly adopted quantitative research methods. Of the 13 articles, 12 used survey methods to collect numeric data and quantitative approaches to analyse data. Only one research article, Wang and Zepeda (2017), adopted qualitative methods such as observing leadership practice and interviews to explore the topic. This indicates that quantitative research methods are used more frequently in this type of research in China.

As quantitative analyses usually have a larger sample size and can reflect trends objectively with less bias, quantitative analyses are useful for understanding the phenomenon of school leadership in China (Bryman, 2012). However, quantitative data alone cannot provide a deep understanding of educational leadership. This is because, compared to quantitative data,

qualitative data helps collect in-depth information and solicit more information in complex situations that cannot be easily measured (Bearman et al., 2012).

4.2.2 Sample sizes

The only qualitative study included in this systematic review included 10 respondents (Wang & Zepeda, 2017). In comparison, sample sizes for the quantitative research studies were significantly larger. This is not surprising. Large sample sizes are needed for quantitative research to show overall patterns, characteristics and features (Bryman, 2012). Larger sample sizes can also improve the rigour and validity of the research.

For this systematic review, sample sizes were grouped into three levels: X (sample sizes less than 500), Y (sample sizes from 500 to 1,000 respondents) and Z (sample sizes over 1,000). Of the 13 studies, three research articles were in the X group with a sample size of fewer than 500 respondents. This group included studies from Jiang and Li (2020) ($N = 427$), Mao et al.(2017) ($N = 386$), and Zhang et al. (2018) ($N = 459$). Five research articles were in the Y group, with a sample size of between 500 and 1,000 respondents. This group included studies from Zeng et al. (2020) ($N=706$), Tian et al. (2021a) ($N = 990$), Wang et al. (2020) ($N= 843$), Zhang and Mao (2020b) ($N = 817$) and Tian et al. (2021b) ($N = 791$). Four studies were in the Z group and had a sample size of over 1,000 respondents. This group included studies from Hou (2018) ($N = 1,022$), Li et al.(2018) ($N = 2,196$), Zhang and Mao (2020a) ($N = 1,133$) and Li et al. (2016) ($N = 1,785$). The sample sizes for these studies were large, and several studies' had over 1,000 respondents. An inference could be made that the empirical studies on educational leadership in the Chinese compulsory schooling system are highly reliable and valid.

4.2.3 Research settings

The research on educational leadership was conducted in various school settings in China. One study was conducted in a kindergarten setting where kindergarten teachers were participants (Zenget al., 2020). Three research projects included teachers from primary schools (Tian et al., 2021a; Zhang & Mao, 2020a, 2020b). One research project included teachers from two middle schools (Wang & Zepeda, 2017). Eight research projects included teachers from both primary and middle schools and investigated their experiences with school leaders.

In addition, the samples were highly representative as they covered the majority of provinces in China, such as Guiyang, Taiyuan, Nanling, Tianjin, Beijing and Guilin. In addition, the samples came from provinces spread across western, middle and eastern China. Therefore, the studies likely represented current educational leadership across China (see Table 3).

Table 3. Characteristics of the research reported in Chinese articles on educational leadership and instruments used.

	Author(s)and year of publication	Sample size	Participants	Instruments
1	Zenget al. (2020)	<i>N</i> =706	Kindergarten teachers in Guiyang city	<ul style="list-style-type: none"> • Shared leadership scale • Organisational innovation scale • Vigor at work scale
2	Wang and Zepeda (2017)	<i>N</i> = 10	Teachers from two middle schools in East China	<ul style="list-style-type: none"> • Interviews and observation by observing two schools' teachers (No instruments or scales)
3	Jiang and Li (2020)	<i>N</i> =427	Teachers from primary and middle schools in Taiyuan, Nanling and Guilin cities	<ul style="list-style-type: none"> • Servant leadership scale • Psychological safety scale • Uncertainty avoidance scale • Work fatigue scale
4	Hou (2018)	<i>N</i> = 1,022	Teachers from 30 primary and middle schools in China	<ul style="list-style-type: none"> • Transformational leadership scale • Transactional leadership scale • Organisational innovation scale
5	Mao et al. (2017)	<i>N</i> = 386	Teachers in primary and middle schools in Hunan, Beijing and Jiangxi provinces	<ul style="list-style-type: none"> • Transformational leadership scale • Authentic leadership scale • Work engagement scale
6	Tian et al. (2021a)	<i>N</i> = 990	Teachers from 14 primary schools in Beijing	<ul style="list-style-type: none"> • Transformational leadership scale • Teachers' well-being scale • Teacher-student relationship scale • Social and emotional learning scale
7	Li et al. (2018)	<i>N</i> = 2,196	Teachers from 180 primary and middle schools in Western China	<ul style="list-style-type: none"> • Transformational leadership scale • Organisational commitment scale
8	Zhang et al. (2018)	<i>N</i> =459	Teachers from 14 primary and middle schools in Beijing and Henan province	<ul style="list-style-type: none"> • Authentic leadership scale • Teacher voice scale • Leader and member exchange scale • Procedural justice scale

	Author(s)and year of publication	Sample size	Participants	Instruments
9	Zhang and Mao (2020a)	<i>N</i> = 1,133	Teachers from primary schools in Beijing and Tianjin	<ul style="list-style-type: none"> • Social and emotional belief scale • Caring leadership scale • Organisational leadership environment
10	Wang et al. (2020)	<i>N</i> = 843	Teachers from primary and middle schools in the South China region	<ul style="list-style-type: none"> • Instructional leadership scale • Teachers' collective efficacy scale • Teachers' self-efficacy scale • Teachers' well-being scale
11	Li et al. (2016)	<i>N</i> =1,785	Teachers from 300 primary and middle schools in one western province	<ul style="list-style-type: none"> • Teachers' commitment to changing the scale • Distributed leadership scale
12	Zhang and Mao (2020b)	<i>N</i> =817	Teachers from nine public primary schools in Beijing	<ul style="list-style-type: none"> • Authentic leadership scale • Social-emotional learning competence • Close teacher-student scale • Social-emotional beliefs
13	Tian et al. (2021b)	<i>N</i> =791	Teachers from eight primary schools and one middle school in Beijing	<ul style="list-style-type: none"> • Transformational leadership scale • Social-emotional competence scale • Teachers' well-being scale • Teachers' job burnout scale

4.3 What are the Leadership Styles and Measurement Scales Used in Chinese Articles on Educational Leadership in the Current Literature?

Leadership style is how leaders adopt behaviours and practices to direct organisations (Rowitz, 2014). Their leadership style or characteristics are typically studied to understand how leaders implement plans and programmes and motivate their employees to work toward their goals (Rowitz, 2014). Popular leadership styles in management and organisational studies include transformational leadership, transactional leadership, situational leadership, distributed leadership, shared leadership, servant leadership, autocratic leadership style, and democratic leadership style (Rowitz, 2014).

A total of eight leadership styles were investigated in the studies examining leadership styles in Chinese primary schools. These eight styles were shared leadership, servant leadership, transformational leadership, transactional leadership, authentic leadership, caring leadership, instructional leadership and distributed leadership. Definitions of the leadership styles found in existing research are presented in Table 4.

From these definitions, it can be seen that there is a strong interest in applying Western-derived models of leadership to the educational context in China. This indicates that Western educational leadership styles substantially impact China's empirical research on educational leadership.

Table 4. Leadership styles in the 13 empirical studies.

Leadership style	Definition	Chinese term	Articles (<i>n</i>)	Author(s)	Measurement scale
Transformational leadership	Transformational leadership aims to inspire teachers to work toward organisational vision and goals instead of merely focusing on immediate self-interests. It makes teachers realise their work values and understand their school values. It encourages teaching innovation and school transformation. Four features of this leadership style are idealised influence, inspiration motivation, individuation consideration and intellectual stimulation (Moolenaar et al., 2010).	变革型领导	5	Hou (2018); Mao et al. (2017); Tian et al. (2021a); Li et al. (2018); Tian et al. (2021b)	Measurement based on Bass (1995) and some adjustments from Li and Shi (2005)
Authentic leadership	Authentic leadership leads team members by high ethical values, honesty and trust. It uses honest values and behaviours to develop trust and fair and authentic relationships, and motivates teachers to achieve self-development and work toward organisational goals (Luthans & Avolio, 2003). Four features of this leadership style are self-awareness, transparent relationship, internal moral value and balancing different parties (Walumbwa et al., 2008).	真诚型领导	3	Mao et al. (2017); Zhang et al. (2018); Zhang and Mao (2020)	Developed by Walumbwa et al.(2008)
Transactional leadership	Transactional leadership promotes team members' compliance through rewards and punishments. It rewards members when they achieve defined goals. The essence of transactional leadership is the transaction between leaders and members. It emphasises supervision, organisation and performance of members(Moolenaar et al., 2010).	交易型领导	1	Hou (2018)	Developed by Bass (1995)

Leadership style	Definition	Chinese term	Articles (<i>n</i>)	Author(s)	Measurement scale
Distributed leadership	Distributed leadership involves school members taking a leader's role or a dynamic position. It emphasises regular rotation of leaders and encourages all schoolteachers to actively participate in decision-making. Two features of this leadership style are: empowerment of teachers, democratic and active participation of teachers (Heck & Hallinger, 2009).	分布式领导	1	Li et al. (2016)	Developed by Heck and Hallinger (2009)
Shared leadership	Shared leadership refers to the state or quality of mutual influence in which team members disperse the leadership role throughout the group, participate in the decision-making process, fulfil tasks traditionally reserved for a hierarchical leader, and, when appropriate, offer guidance to others to achieve group goals (Lowe, 2004).	共享型领导	1	Zenget al. (2020)	Developed by Zhao and Zhao (2012).
Servant leadership	Servant leadership is different from traditional top-down leadership. It emphasises services and an employee-centred philosophy, focuses on followers' needs, and empowers and develops followers. It also encourages resource sharing and active instruction to followers and respects and treats followers sincerely and responsibly (van Dierendonck, 2011).	服务型领导	1	Jiang and Li (2020)	Developed by Liden et al. (2014)
Caring leadership	Caring leadership means the process of leading team members by caring for others and developing a caring culture in schools to develop a vision and achieve goals (Louis et al., 2016).	关心型领导	1	Zhang and Mao (2020a)	Developed by Louis et al. (2016)
Instructional leadership	Instructional leadership focuses on the leadership behaviours of teachers' teaching and students' learning behaviour. It creates school vision and strategy, manages teaching projects, and establishes school culture (Manaseh, 2016).	教学型领导	1	Wang et al. (2020)	Developed by Alig-Mielcarek and Hoy (2005)

Table 4 shows that the transformational leadership style (变革型领导) was the most popular leadership style explored by researchers in the 13 empirical studies. Five research articles focused on the transformational leadership style (变革型领导), especially its effectiveness under the Chinese public schooling system. Of these five articles, Hou (2018) examined the impact of transformational leadership on the teaching innovation of teachers. Two articles focused on the effects of commitment. Mao et al. (2017) compared the impact of transformational and authentic leadership on teachers' work engagement. Li et al. (2018) discussed the impact of transformational leadership on teachers' organisational commitment, including their affective commitment, continuance commitment and normative commitment. In addition, Tian et al. (2021a) explored the impact of transformational leadership on teachers' job satisfaction by considering the moderating effect of two factors: teacher-student relationship and teachers' social and emotional learning.

Moreover, Tian et al. (2021b) also analysed the impact of transformational leadership on teachers' job burnout. They considered the moderating effect of two factors: the teacher-student relationship and the social and emotional learning scale. The preference for transformational leadership in Chinese literature could be due to its popularity, as shown in many Chinese studies (Tian et al., 2021b). Therefore, it is useful to check it in educational leadership in China. The above findings indicate that transformational and authentic leadership, as shown in Table 4, are two popular leadership styles used in China. However, there are other leadership styles utilised that are less studied. One possible reason for this is that transformational leadership and authentic leadership are very common in leadership research in other disciplines (Tian et al., 2021b), and this could cause researchers to focus on these two leadership styles. The other leadership styles are also discussed less as they are not as prevalent in China, and this is a research gap in current China educational leadership research.

Interestingly, the measurement scales used in researching Western leadership styles are reasonably reliable in the Chinese educational context. As the following sections will show, the overall Cronbach's alphas of the measurement scales are high, even though there are significant cultural differences between China and Western countries. This implies that applying Western leadership styles in the Chinese context is a good idea.

It may also be a good idea for Chinese educational leaders to adopt transformational or authentic leadership. This is because the two leadership styles have proven benefits (Hou, 2018; Tian et al., 2021a; Li et al., 2018; Mao et al., 2017; Zhang et al., 2018; Zhang & Mao, 2020b). Given that China now encourages a quality-oriented education that promotes students' creative spirit and ability (China Net, 2003), educational leaders must care for their teachers through idealised influence, inspiration, motivation, individuation consideration and intellectual stimulation.

4.3.1 Transformational leadership style

The transformational leadership style aims to inspire teachers to work toward an organisational vision and goals instead of leaders merely focusing on their immediate self-interests. This style makes teachers realise their work values and understand their school's values, and in turn, encourages teaching innovations and school transformation (Moolenaar et al., 2010). This is often achieved by influencing followers in four ways: idealised influence, inspirational motivation, individuation consideration and intellectual stimulation (Moolenaar et al., 2010). Idealised influence means a leader acts as a role model, exemplifying desired work ethics and behaviours. The leaders are perceived as the idealised impression by their followers (Gill et al., 1999). Inspirational motivation means a leader shares an appealing and inspiring vision with followers and optimistically communicates future goals to followers (Gill et al., 1999). This makes followers feel a strong sense of motivation to act to achieve the goals. Individuation consideration means understanding an individual's needs and supporting followers to achieve their individual goals and objectives. A leader can be a mentor or coach, provide empathy, openly communicate, respect followers' needs, and meet with them (Gill et al., 1999). Intellectual stimulation requires leaders to challenge followers' ideas by sharing appropriate knowledge and generating more innovative ideas, and in turn, encourages creativity from their followers (Gill et al., 1999). Therefore, the study from Gill et al. (1999) indicates that idealised influence, inspirational motivation, individuation consideration and intellectual stimulation are four critical components of transformational leadership.

The measurement scales used to measure transformational leadership are highly reliable in China's educational leadership context. Cronbach's alpha is an indicator that measures

the internal consistency and reliability of a set of related items as a group. The value of Cronbach's alpha can be 0 to 1 (Tavakol & Dennick, 2011). A higher Cronbach's alpha means greater internal consistency of the items and higher reliability. Acceptable values for Cronbach's alpha must be above 0.7 (Tavakol & Dennick, 2011). All the studies that measured transformational leadership in China had high Cronbach's alpha, which means high reliability and internal consistency of the transformational leadership scale developed by Bass (1995) and the adjustment measurement instruments from Li and Shi (2005). It also shows that these measurement scales are not only suitable for the Western context, but are also highly suitable for China's educational context.

For example, Hou (2018) used the transformational leadership scale developed by Bass (1995). This scale measures the transformation of leadership from idealised influence (领导魅力), inspiration motivation (鼓舞性激励), individuation consideration (个性化关怀) and intellectual stimulation (智力激发) with 23 questions. Cronbach's alpha for each dimension was above 0.890. Mao et al.'s (2017) research used a similar measurement scale. The Cronbach's alpha was over 0.9 for each dimension (德行垂范 = 0.939, 愿景激励 = 0.917, 个性化关怀 = 0.913, 领导魅力 = 0.932). Tian et al. (2021a) also used the same four dimensions of the measurement scale as Mao et al. (2017). Cronbach's alpha for their research was 0.989. Li et al. (2018) made some adjustments and the overall Cronbach's alpha was 0.971. Cronbach's alpha for each dimension, namely idealised influence, inspiration motivation, individuation consideration and intellectual stimulation, were 0.867, 0.935, 0.944 and 0.955, respectively. The empirical research from Tian et al. (2021b) also used the adjusted measurement of the transformational leadership scale in a Chinese-specific context. The overall Cronbach's alpha was 0.96.

4.3.2 Authentic leadership

The second most popular leadership style described in the current leadership literature was authentic leadership (真诚型领导). Three research articles, namely, Mao et al. (2017), Zhang et al. (2018), and Zhang and Mao (2020b), analysed authentic leadership in primary and middle schools. School leaders with authentic leadership attributes lead their team members with high ethical standards, honesty and trust. They are described as leading team members with

self-awareness, internal morals, transparent relationships and balanced ability. Values of honesty are used to develop trust and fair and authentic relationships, which can motivate team members to achieve self-development and work toward organisational goals (Luthans & Avolio, 2003). This type of leadership has four unique features: self-awareness (自我意识), internal morals (内化道德), transparent relationships (关系透明) and the ability to balance priorities (平衡处理) (Walumbwa et al., 2008). Self-awareness means that a leader clearly understands strengths and weaknesses and is willing to listen to followers' ideas. Internal morals means that a leader has a high level of ethical values and their behaviours are highly ethical. A transparent relationship means that a leader establishes transparent relationships with their followers, colleagues and upper-level managers, and that information is symmetric in the leader's organisation. The ability to balance priorities means that a leader balances the interests of different parties based on objective data, evidence, and other factors (Walumbwa et al., 2008).

Similar to transformational leadership, the measurement scales for authentic leadership were reasonably reliable for China's educational leadership context. Mao et al. (2017) used the measurement scale from Walumbwa et al. (2008). This measurement scale focused on self-awareness (自我意识), internal morals (内化道德), transparent relationships (关系透明) and the ability to balance priorities (平衡处理). The overall Cronbach's alpha was 0.98. Cronbach's alpha for self-awareness, internal morals, transparent relationships and the ability to balance priorities were 0.911, 0.882, 0.897 and 0.899, respectively. The research from Zhang et al. (2018) used Walumbwa et al.'s (2008) measurement scale to measure the authentic leadership capabilities of school leaders. The overall Cronbach's alpha was 0.96 in their datasets. Zhang and Mao (2020b) also used the same measurement scale from Walumbwa et al. (2008), and the overall Cronbach's alpha was 0.98. As the Cronbach's alphas in the three research articles were all above 0.7, this indicates high reliability of Walumbwa et al.'s (2008) measurement scale in China's compulsory school context. Therefore, authentic leadership is suitable and valuable to China's educational leadership context.

4.3.3 Other less researched leadership styles

Less researched leadership styles are transactional leadership, distributed leadership, shared leadership, servant leadership, caring leadership and instructional leadership. Only one research article analysed the impact of transactional leadership (交易型领导) on teachers' innovation in educational practice in China (Hou,2018). Transactional leadership is the transaction between leaders and team members, which in the school context are principals and teachers. Principals emphasise supervision, organisation and members' performance(Moolenaar et al., 2010). Transactional leadership consists of three elements, namely, contingent reward(权变理论), active management-by-exception (主动例外管理) and passive management-by-exception (被动例外管理). Contingent reward means a leader setting expectations and rewarding workers for meeting the expectations. Active management-by-exception means that a leader predicts problems, monitors progress and takes corrective measures to resolve problems. Passive management-by-exception means that a leader does not interfere with workflow unless an issue arises (Hou, 2018). Transactional leaders promote team members' compliance by using rewards and punishments. Principals who employ this style reward teachers when they achieve defined goals. Hou (2018) used the measurement scale from Bass (1995), and the overall Cronbach's alpha was 0.840. As acceptable values of Cronbach's alpha must be above 0.7 (Tavakol & Dennick, 2011), this proves that the transactional leadership scale developed by Bass (1995) is suitable for the Chinese compulsory school context.

Distributed leadership (分布式领导) is when a leader's role or position is dynamically shared by team members in schools. Li et al. (2016) discussed the effect of leadership style on teachers' commitment to change in the compulsory schooling system. Distributed leadership comprises three key components: empowerment of teachers (组织赋权), democratic decision-making and cooperation (决策合作) and the active participation of teachers (教师参与) (Heck & Hallinger, 2009). Empowering teachers involves encouraging teachers to be a leader if they are consistent with the relevant leader requirements. Democratic decision-making and cooperation means that a leader negotiates with others when making decisions and does not behave autocratically. They should be cooperative. Active participation of teachers means that a leader and teachers should actively take responsibility for supporting school development

and implement relevant tasks to achieve required goals (Heck & Hallinger, 2009). Distributed leadership emphasises the regular rotation of leaders and encourages all teachers to participate actively in the decision-making process. Li et al. (2016) used the measurement scale developed by Heck and Hallinger (2009), and the overall Cronbach's alpha for distributed leadership was 0.873. This implies high reliability of the measurement scale.

Shared leadership(共享型领导) refers to the state or quality of mutual influence in which team members disperse the leadership role throughout the group, participate in the decision-making process, fulfil tasks traditionally reserved for a hierarchical leader, and, when appropriate, offer guidance to others to achieve group goals (Lowe, 2004). One research article from Zeng et al. (2020) discussed the effect on teachers' vigour at work. Shared and distributed leadership are very similar, as both emphasise the trust of team members and democratic decision-making. However, the two leadership styles are different with regard to the formal position of leaders. Shared leadership defines leadership from a participative perspective in which individuals and situations interact. There is no formal position or leadership role in the organisation, but leadership happens naturally due to the knowledge and competencies of team members. However, distributed leadership still emphasises formal leadership positions to influence others, and each member rotates in different situations (Harris, 2003). The measurement scale used was developed by Zhao and Zhao (2012). The overall Cronbach's alpha for shared leadership was 0.89 and was highly reliable.

Servant leadership (服务型领导) is different from traditional top-down leadership. As a form of human-centred leadership, it emphasises services and an employee-centred philosophy, focuses on followers' needs, and empowers and develops followers. This type of leadership encourages resource sharing and active instruction to followers and respects and treats followers sincerely and responsibly (van Dierendonck, 2011). Jiang and Li (2020) discussed the effects of servant leadership on teachers' work fatigue. The measurement scale for servant leadership developed by Liden et al. (2014) comprised seven questions, and the overall Cronbach's alpha was 0.89. The reliability and validity of this measurement was high. This indicates that this measurement scale for servant leadership is suitable for China's educational context.

Caring leadership (关心型领导) is a style of leadership that relies on the process of leading team members by developing a caring culture, developing a vision and achieving goals (Louis et al., 2016). Caring leadership requires leaders to actively care for others, empathise and think about situations from others' perspectives, treat followers sincerely and lead others transparently (Louis et al., 2016). Zhang and Mao (2020a) used the measurement scale developed by Louis et al. (2016) to explore the effect of caring leadership on the development of teachers' social-emotional beliefs. The overall Cronbach's alpha was 0.97. This indicates that this measurement scale for caring leadership is suitable for China's educational context.

Instructional leadership (教学型领导) focuses on leadership behaviours that promote teachers' teaching and students' learning behaviours. School leaders promote improvement by creating vision and strategies, managing teaching projects, and establishing school culture (Manaseh, 2016). There are three components of instructional leadership: support for teachers' career development (教师职业发展支持), cooperation with teachers in developing courses (同教师合作研讨教学) and teachers' feedback (教师反馈) (Alig-Mielcarek & Hoy, 2005). Wang et al. (2020) used a measurement scale developed by Alig-Mielcarek and Hoy (2005) to explore the impact of principals' instructional leadership on teachers' well-being. The Cronbach's alpha was 0.959. This value also indicates high reliability and validity of the instructional leadership scale in China's compulsory school context.

4.4 Leadership Styles are Known to Improve Teachers' Well-Being

The CCP Central Committee and The State Council launched "Opinions on Comprehensively Deepening the Reform of the Construction of Teachers in the New Era" in February 2018 (CCTV, 2018). This states that the China State Council wants to establish a high-performance team. It aims to make teachers happy and honourable until 2035 and make teachers' jobs attractive and admired in society (Tian et al., 2021b). This milestone policy in education has driven 27 articles on developing high competence and well-being in teachers.

Consequently, a significant trend discussed in the literature focuses on the impact of educational leadership on teachers' well-being. A teacher's well-being is the teacher's ideal psychological happiness or satisfaction and includes their life satisfaction, job satisfaction and positive emotions (Tian et al., 2021a). Existing research indicates that teachers' well-being in

Chinese primary and middle schools is low, especially for teachers in Chinese primary and middle schools in rural areas and cities. Jiang and Li (2020) pointed out that teacher work fatigue among middle and primary school teachers has risen significantly over the previous 10 years. Teachers with work fatigue often feel anxious, tense, frustrated or fearful to complete their work tasks. This is important to note, as school leaders are essential to providing teachers with work resources and social support (Jiang & Li, 2020). Tian et al. (2021a) also noted that teachers' well-being is poor in China. It is essential to improve teachers' satisfaction as it is a crucial component of improving teaching quality (Tian et al., 2021a). Wang et al. (2020) also noted that teachers' well-being is a concern within broader society. This is because a higher level of teacher well-being can create better work outcomes and improve teachers' loyalty to the school.

Researchers have indicated that an appropriate leadership style, such as instructional leadership, can improve teachers' well-being. Wang et al. (2020) found that principals' instructional leadership directly improves teachers' well-being. The correlation coefficient between instructional leadership and teachers' well-being was 0.438 (p -value $< .001$, $N = 843$). Their structural equation modelling used teachers' self-efficacy to mediate between instructional leadership and teachers' well-being. Their analysis indicates that instructional leadership raises teachers' well-being in two ways. The first way is through transformational leadership ($\beta = 0.172^{**}$) \rightarrow teachers' well-being. This means that transformational leadership can directly and significantly contribute to teachers' well-being and improves their job satisfaction. The second way is through transformational leadership ($\beta = 0.668^{**}$) \rightarrow teachers' collective efficacy ($\beta = 0.104^{**}$) \rightarrow teachers' well-being. This indicates that instructional leadership also raises teachers' collective efficacy, which significantly contributes to teachers' well-being (Wang et al., 2020).

Similar to Wang et al.'s (2020) research, other studies suggest that transformational leadership can positively contribute to teachers' well-being. Research from Tian et al. (2021a) indicated that the correlation coefficient between transformational leadership and teachers' well-being was 0.48 (p -value $< .01$). The correlation coefficient between transformational leadership and teacher-student relationship was 0.55 (p -value $< .01$). The correlation coefficient between transformational leadership and teachers' social and emotional learning scale was 0.52 (p -value

<.01). In addition, the structured equation model indicates four transformational leadership pathways that contribute to teachers' well-being. First, transformational leadership can directly contribute to (beta=0.24**) → teachers' well-being, which explains 46% of the effect. The second way is through social and emotional learning of teachers (beta = 0.28**)→teachers' well-beingwhich explains 29% of the effect. The third way is through transformational leadership (beta = 0.24**) →teacher-student relationship (beta= 0.20**) → teachers' well-beingwhichexplains 10% of the effect. The fourth way is transformational leadership (beta = 0.56**)→ social and emotional learning of teachers (beta =0.65**)→ teacher-student relationship well-being (beta = .20**) →teachers' well-being which explains 15% of the effect (Tian et al., 2021a). As can be seen, transformational leadership can improve teachers' job satisfaction by improving their morale and relationships, and this can motivate teachers to work more actively than required. Therefore, schools should develop the provision of individual care to teachers as this helps improve job satisfaction (Tian et al., 2021a). In addition, Tian et al. (2021a) also noted that role-modelling by principals,sharingthe school vision and goals to motivate teachers, and helping teachers link their personal goals to the school vision can improve teacher satisfaction.

Servant leadership in the compulsory school setting in China can also improve teachers' well-being. Teachers' well-being focuses on job satisfaction and positive emotion. Higher positive emotion means lower work fatigue at work (Tian et al., 2021b). Wu et al. (2019) sampled 7,672 primary and middle school teachers and found that teachers' work fatigue rose significantly overthe previous10 years. Teachers experiencing high work fatigue (情绪衰竭) often felt anxious, tense, frustrated or fearful to complete their work tasks. Jiang and Li (2020) provedthe effectiveness of servant leadershipin reducing teachers' work fatigue. The correlation coefficient between servant leadership and work fatigue was -0.21 (p-value <.001, N = 427). This means that a higher inclination toward servant leadership can reduce the work fatigue of teachers by improving their psychological safety. The mediated moderation model analysis shows a causal effect (servant leadership →psychological safety →work fatigue of teachers) and is significant when teachers'uncertainty avoidance was at the low or middle levels. The uncertainty avoidance of teachers, therefore,plays a moderating role. When teachers had a low level of uncertainty avoidance, the effect value for the relationship (servant

leadership → psychological safety → work fatigue) was -0.14 (CI -0.22 to -0.07). When teachers had a level of uncertainty avoidance in the middle, the effect value for the pathway was -0.08 (CI -0.13 to -0.04). The main explanation from Jiang and Li (2020) for this pathway is that servant leadership shows a high work ethic, and the spirit of helping others helps teachers establish high-quality relationships. This makes teachers feel psychologically safe, especially teachers with low levels of uncertainty avoidance who usually prefer work autonomy and empowerment from their principals. Servant leadership makes them respond better to the changing environment, have a higher psychological safety level, and reduce work fatigue, thereby improving teachers' well-being.

Teachers' well-being has become a problem with the rising trend of work fatigue. Teachers' work fatigue has caught the attention of the Chinese Government. One way of resolving the negative impact of work fatigue is to adopt appropriate leadership styles to raise teachers' well-being. These leadership styles include transformational leadership and servant leadership and could directly increase teachers' well-being. Another issue is that these two leadership styles also indirectly contribute to teachers' well-being by raising their psychological safety, improving teacher-student relationships and supporting teachers' social and emotional learning. This proves that leadership styles are essential to teachers' well-being.

4.5 Leadership Styles are Known to Improve Teachers' Commitment

Current literature discusses the relationship between teachers' commitment and principals' leadership styles and focuses on two points. The first is teachers' organisational commitment, and the second is their commitment to change.

4.5.1 Teachers' organisational commitment

Teachers' organisational commitment refers to teachers' value recognition, work engagement and loyalty to the school. It contains three components (Meyer & Allen, 1991). The first is affective commitment. Teachers are committed to a school due to their emotional attachment and identity recognition. The second is continuance commitment which means being committed to a school to avoid losing relevant economic income and other economic interests. The third is normative commitment which indicates that teachers are committed to an organisation due to social norms or responsibilities (Meyer & Allen, 1991). The organisational

commitment of teachers in urban schools ($M = 3.71$, standard p -value $<.001$) was higher compared to teachers in rural schools ($M = 3.71$, p -value $<.001$) across all three components (affective commitment, continuance commitment and normative commitment) (Li et al., 2018).

Transformational leadership significantly and positively influences teachers' commitment. Li et al. (2018) classified teachers' perceptions of transformational leadership into three levels (high, medium and low). They found that a high level (a score for transformational leadership >3.93) comprised 33.3% of the sample, middle level (a score for transformational leadership from 3.20 to 3.93) comprised 33.3% of the sample and low level (a score for transformational leadership < 3.02) comprised 33.3% of the sample. The overall teachers' commitment for high, middle and low levels was 4.09, 3.40 and 2.83, respectively (p -value $<.01$). Moreover, the mean values for affective commitment for the high, middle and low levels of transformational leadership were 4.48, 3.61 and 2.83, respectively (p -value $<.01$). The mean values for normative commitment for the high, middle and low levels of transformational leadership were 3.68, 3.13 and 2.68, respectively (p -value $<.01$). The mean values of continuance commitment for the high, middle and low levels of transformational leadership were 4.12, 3.45 and 2.97, respectively (p -value $<.01$). These results clearly show that a high level of transformational leadership can contribute to a high level of affective commitment, normative commitment, and continuance commitment. On the contrary, a low level of transformational leadership often causes a low level of affective commitment, normative commitment, and continuance commitment.

For overall teachers' commitment, the beta coefficients for four components of transformational leadership, namely, idealised influence (领导魅力), inspiration motivation (鼓舞性激励), individuation consideration (个性化关怀) and intellectual stimulation (智力激发) were 0.156 (p -value $<.01$), 0.346 (p -value $<.01$), 0.225 (p -value $<.01$) and 0.150 (p -value $<.01$), respectively. The R-square of this regression was 0.686, which means the four components of transformational leadership can explain a 68.6% change of teachers' overall commitment to schools (Li et al., 2018). Li et al. (2018) also used the four components of transformational leadership as independent variables to predict affective commitment, continuance commitment and normative commitment. For affective commitment, the beta coefficients for four components of transformational leadership, namely, idealised influence

(领导魅力), inspiration motivation (鼓舞性激励), individuation consideration (个性化关怀) and intellectual stimulation (智力激发) were 0.202 (p-value <.01), 0.364 (p-value <.01), 0.114 (p-value <.01) and 0.223 (p-value <.01), respectively. The R-square of this regression was 0.724, which means the four components of transformational leadership can explain 72.4% of teachers' affective commitment. For the continuance commitment, the beta coefficients for four components of transformational leadership, namely, idealised influence (领导魅力), inspiration motivation (鼓舞性激励), individuation consideration (个性化关怀) and intellectual stimulation (智力激发) were 0.132 (p-value <.01), 0.208 (p-value <.01), 0.148 (p-value <.01) and 0.154 (p-value <.01), respectively. The R-square of this regression was 0.378, which means the four components can explain 37.8% of teachers' continuance commitment. For the normative commitment, the beta coefficients for four components of transformational leadership, namely, idealised influence (领导魅力), inspiration motivation (鼓舞性激励), individuation consideration (个性化关怀) and intellectual stimulation (智力激发) were 0.053 (p-value <.01), 0.357 (p-value <.01), 0.128 (p-value <.01) and 0.233 (p-value <.01), respectively. The R-square of this regression was 0.528, which means the four components explain 52.8% of teachers' normative commitment.

These studies indicate that teachers' commitment includes three types: affective commitment, continuance commitment and normative commitment. Transformational leadership raises teachers' commitment. All four components of transformational leadership, namely, idealised influence (领导魅力), inspiration motivation (鼓舞性激励), individuation consideration (个性化关怀) and intellectual stimulation (智力激发) can significantly contribute to the teachers' commitment. This proves the effectiveness of transformational leadership in raising the commitment of teachers in schools.

4.5.2 Teachers' commitment to change

Another form of commitment is teachers' commitment to change. Teachers' commitment to change, in essence, is self-efficacy. It is a core element for teachers participating in school reform and change. It comprises four elements: personal goals (个人目标), emotional arousal process(情绪唤醒), context beliefs(环境信念) and capacity beliefs(能力信念) (Leithwood et al., 1999). Personal goals mean teachers develop their individual goals to support change. The

emotional arousal process refers to teachers keeping positive emotions in supporting teachers for change. Context beliefs refer to the school providing an environment such as financial support or professional development for teachers to assist changes in their teaching (Li et al., 2016). Capacity belief means that teachers believe that they can achieve their individual goals and realise their potential.

Li et al. (2016) found that distributed leadership can predict teachers' commitment to change. Specifically, there is a positive relationship between the two variables. The correlation coefficient between distributed leadership and teachers' commitment to change was 0.687 (p -value $<.01$). This means a higher relationship between the two variables. Moreover, distributed leadership consists of three dimensions: the empowerment of teachers (组织赋权), democratic decision-making and cooperation (决策合作) as well as the active participation of teachers (教师参与). The correlation coefficient between distributed leadership and teachers' commitment to change was 0.687 (p -value $<.01$). The correlation coefficients of teachers' commitment to change among empowerment to teachers (组织赋权), democratic decision-making and cooperation (决策合作) and active participation of teachers (教师参与) were 0.533 (p -value $<.01$), 0.560 (p -value $<.01$) and 0.435 (p -value $<.01$), respectively (Li et al., 2016). In addition, the teachers' commitment to change includes four dimensions which are personal goals (个人目标), emotional arousal process (情绪唤醒), context beliefs (环境信念) and capacity beliefs (能力信念). The correlation coefficients of distributed leadership to personal goals (个人目标), emotional arousal process (情绪唤醒), context beliefs (环境信念) and capacity beliefs (能力信念) were 0.428 (p -value $<.01$), 0.600 (p -value $<.01$), 0.576 (p -value $<.01$) and 0.602 (p -value $<.01$), respectively (Li et al., 2016). In addition, the regression analysis from Li et al. (2018) also proved this effect. Distributed leadership (i.e. empowerment to teachers (组织赋权), democratic decision-making and cooperation (决策合作), active participation of teachers (教师参与) were 0.294 (p -value $<.01$), 0.371 (p -value $<.01$) and 0.318 (p -value $<.01$), respectively. The R-square was 0.511. This means that the three components can predict 51.1% change of teachers' commitment to change. Therefore, this shows that distributed leadership also can predict teachers' commitment to change as there is a positive relationship between the two variables. It is suggested that distributed leadership effectively

improves teachers' commitment to change, and principals in future should use this in practice to make schools respond better to changes.

These studies indicate that teachers' commitment to change is highly related to the distributed leadership of educational leaders. The three components of educational leaders, namely, empowerment of teachers (组织赋权), democratic decision-making and cooperation (决策合作) and active participation of teachers (教师参与), can contribute to the four components of teachers' commitment to change, namely, personal goals (个人目标), emotional arousal process (情绪唤醒), context beliefs (环境信念) and capacity beliefs (能力信念). This implies that educational leaders in China can learn to use the distributed leadership style to raise teachers' commitment to change in practice.

4.6 Social and Emotional Competence of Teachers Related to Leadership Styles

Social and emotional competence (SEC) involves successfully managing emotional arousal and engaging positively in social settings. SEC is important skills in a school setting. Principals and teachers who are aware of their own emotions and those of their students practise emotional regulation, exhibit appropriate emotional expression and role model social skills with students and peers, such as perspective-taking, empathy and social problem-solving (Fenning et al., 2011). People with higher social and emotional learning abilities know how to interact with others, understand others' emotions and build positive social relations. Having a high level of SEC also means that a person can better control negative emotions (Zinsler & Christensen, 2016). SEC in leaders is a critical factor impacting the effect of some leadership styles and plays a moderating role.

Firstly, SEC is moderating the relationship between transformational leadership and teachers' well-being. Tian et al. (2021b) found that a SEC has a positive relationship with transformational leadership (correlation coefficient = 0.51, p-value < .01) and teachers' well-being (correlation coefficient = 0.51, p-value < .01). In addition, transformational leadership can positively predict the SEC of teachers (beta coefficient = 0.55, p-value < .01) and the SEC of teachers is negatively related to job burnout (correlation coefficient = -0.55, p-value < .01). A further regression analysis showed that transformational leadership can positively predict the SEC of teachers and the beta coefficient was 0.55 (p-value < .01). The

SEC of teachers also can negatively predict teachers' job burnout. The beta coefficient was -0.42 (p-value <.01) (Tian et al., 2021b). This indicates that the SEC of teachers plays a moderating role in transformational leadership and predicting teachers' job burnout. Therefore, transformational leadership can improve teachers' SEC, and in turn, controls teachers' job burnout at work. Moreover, improving teachers' SEC also helps raise job satisfaction (Tian et al., 2021b). In research from Tian et al. (2021a), their structural equation model indicated that transformational leadership can positively raise the SEC of teachers. The beta coefficient was 0.56 (p-value <.01). Therefore, the SEC of teachers contributes to teachers' job satisfaction as the beta coefficient was 0.28 (p-value <.01). This indicates that the SEC of teachers plays a moderating role in transformational leadership and predicting teachers' job satisfaction.

The SEC of teachers also plays a moderating role in the relationship between authentic leadership and students' development of their social and emotional beliefs. Zhang and Mao (2020a) showed that the SEC of teachers in primary and middle schools was positively related to authentic leadership (correlation coefficient = 0.62, p-value <.05). In addition, the SEC of teachers was also positively related to teacher-student relationships (亲密师生关系) (beta = 0.75, p-value <.001) and students' social and emotional beliefs (学生社会情感) (beta = 0.63, p-value <.001). An authentic leadership style can improve the SEC of teachers and contribute to higher level of empathy, communication skills and confidence among teachers. These elements are critical for teachers to manage strong relationships with students and effectively deal with conflicts in teacher-student relationships (Zhang & Mao, 2020a). When there is a positive teacher-student relationship, students trust teachers, learn from teachers' positive SEC, and develop their own social and emotional beliefs.

Caring leadership is highly related to the SEC of teachers. Zhang and Mao (2020b) indicated that caring leadership and organisational culture (学校组织文化) could predict the SEC of teachers. When organisational culture (学校组织文化) is excluded, caring leadership can significantly and positively predict the SEC of teachers (beta coefficient = 0.22, p-value <.01). When organisational culture (学校组织文化) was included, the beta coefficient for caring leadership dropped to 0.12 (p-value <.01). These results suggest that caring leadership can positively promote organisational culture in schools which assists the development of SEC of teachers.

These studies clearly indicate that leadership styles such as transformational leadership, authentic leadership, and caring leadership can help raise the SEC of teachers. Transformational leadership can positively predict the SEC of teachers. An authentic leadership style can also improve trust and interaction with teachers, improve teacher-student relationships and help improve their SEC. Caring leadership can positively contribute to a warm and caring school culture, which is important to raise the SEC of teachers. The SEC of teachers is critical to their healthy development by reducing job burnout and raising job satisfaction.

4.7 Discussion of Research Knowledge Gaps

There are at least three knowledge gaps within existing research written in Mandarin on leadership styles in the Chinese compulsory schooling system.

The first significant research gap is that current research on Chinese educational leadership shows little consideration of the influence of the CCP on principals' leadership styles. Unlike in Western countries, Chinese compulsory schooling is heavily influenced by the CCP branch regarding policies that lead to school development. The branch secretary of the CCP plays a vital role in the core decision-making unit in China (Lai et al., 2017) and the school principal is only the vice branch secretary. However, the Chinese literature does not discuss this influence on leadership. For example, Hou (2018) explored the influence of transformational and transactional leadership on teachers' job satisfaction and innovation. Walker and Qian (2020) argued that instructional leadership is a suitable leadership model for Chinese schools. However, they did not consider the influence of the CCP on their instructional leadership model. Zeng et al. (2020) suggested shared leadership influenced teachers' innovation. Jiang and Li (2020) explored servant leadership's influence on improving teachers' satisfaction and job safety. Mao et al. (2017), Zhang et al. (2018), and Zhang and Mao (2020b) focused on the influence of authentic leadership. Other leadership styles considered in China's empirical research on educational leadership were caring leadership, instructional leadership, distributed leadership and transactional leadership (Zhang & Mao, 2020a; Wang et al., 2020). However, none of these studies referred to the CCP and its influence on leadership styles. The Chinese Central Government Reformation Bureau recently enacted the Regulation of Establishing the Principal's Responsibility System. This regulation indicates that all Chinese primary schools should institute a CCP branch. This regulation is likely to strengthen the leadership role of the

CCP within primary schools (China Education News Network, 2021). Therefore, this is a research gap that past Chinese studies on Chinese educational leadership have not considered.

The second research gap is that current leadership models do not consider the influence of Confucian culture and its impact on principals' leadership styles in China or the conflicting ideals of Confucian culture concerning existing theories of effective educational leadership. According to Militello and Berger (2010), Confucianism consists of four elements. The first is paternalistic authoritarianism, which emphasises authority. The second is action morality and self-cultivation, which emphasises morality and values such as benevolence. The third is collectivism and interpersonal relationships. The fourth is humanism, which involves love without discrimination and distinction. Confucianism has deeply impacted Chinese society for over 200 years, and especially its political and social systems. Chinese society has experienced a radical change to socialism, but the influence of Confucianism in China is still pervasive (Lim & Thien, 2020). How does Confucius' thought impact educational leadership in China? When we discuss educational leadership in China, it is essential to focus on this influence as principals' leadership is highly contextual and culturally specific. Even in contemporary socialist Vietnam, Confucianism has strongly impacted school leadership (Truong et al., 2017). However, current literature related to Chinese educational leadership, such as Hou (2018), Walker and Qian (2020), and Jiang and Li (2020), has not explored the Confucian effect. This is a research gap to be explored in future.

The third research gap is that the current research frameworks did not discuss strategies for improving the professional skills or expertise of Chinese principals. Poor professional skills of principals in Chinese primary schools, especially in less developed regions, are prevalent (Liu & Hallinger, 2018). Some studies have listed expertise as an essential element for primary school principals in China. Primary school teachers hope that their school leaders, such as principals, can use their professional skills to lead teacher growth instead of using hierarchical power to supervise or direct them (Walker & Qian, 2020; Wang, 2016; Zhong & Ehrich, 2010). The development of primary school principals' professional expertise has come to the attention of the Chinese Ministry of Education in China recently. The Ministry of Education enacted a Regulation on Managing Chinese Primary School and Middle School Principals (Ministry of Education of People's Republic of China, 2017), which requires all principals to develop

long-term professional vision, values and morals to reform primary schools and build the rexpertise in directing primary education in the future. These professional skills and expertise should develop principals' competencies in long-term strategic planning, leading teaching and curriculum knowledge, promoting teacher growth and development, optimising internal management systems and adapting to the external environment (Ministry of Education of People's Republic of China, 2017). However, none of the existing studies systematically discussed how to develop the expertise or professional skills of Chinese principals.

4.8 Chapter Summary

Chapter 4 systematically reviewed the current empirical literature on educational leadership in China. A total of 13 Chinese articles focused on school leadership research were found, and 12 articles used quantitative research methods and one used qualitative research methods. The 13 Chinese research articles explored eight leadership styles: shared leadership, servant leadership, transformational leadership, transactional leadership, authentic leadership, caring leadership, instructional leadership and distributed leadership. Among these leadership styles, transformational leadership and authentic leadership received much interest from Chinese researchers. Five research articles were related to transformational leadership, and three research articles were related to authentic leadership. The measurement scales for the eight leadership styles were all reliable and valid in the China compulsory schooling context. In addition, the findings also indicate that some leadership styles can improve teachers' well-being. Transformational leadership, servant leadership, and instructional leadership practices can raise teachers' well-being directly or indirectly.

It was also found that leadership styles also contributed to teachers' organisational commitment and teachers' commitment to change. The transformational leadership approach discussed in the literature significantly and positively influenced teachers' commitment. Distributed leadership is an effective way to improve teachers' commitment to change. The findings also indicate that teachers' SEC plays a moderating role in the relationship between leadership styles impacting others. For example, it plays a moderating role in the relationship between transformational leadership and teachers' well-being and the relationship between authentic leadership and students' social and emotional belief development.

Caring leadership can positively promote organisational culture in schools, assisting teachers' development of SEC. However, despite many findings on leadership styles in the current literature, three knowledge gaps exist on leadership styles. These include little consideration of the influence of the CCP on the principal's leadership style, lacking consideration of the effect of Confucian culture and its impact on leadership style in China, and lacking discussion of the ways or strategies of improving professional skills or expertise for Chinese principals.

Chapter 5: Developing a Culturally Appropriate Educational Leadership Framework for Educational Leaders in China

5.1 Introduction

Educational leadership frameworks in other countries were explored to develop a suitable educational framework for the Chinese context. Understanding these educational leadership frameworks provided valuable lessons and learning for the Chinese context. This chapter summarises the educational leadership frameworks from three jurisdictions: Australia, New Zealand, and the ASEAN. The three educational leadership frameworks were *The Competency Framework for Southeast Asian School Heads* developed by the Southeast Asian Ministers of Education Organization (SEAMEO) Regional Center for Educational Innovation and Technology (2015), the *New Zealand Educational Leadership Capability Framework* developed by the New Zealand Education Council (2018), and the *Australian Professional Standard for Principals and the Leadership Profiles* developed by the Australian Institute for Teaching and School Leadership (2019).

This chapter has five sections. Section 5.1 is the introduction. Section 5.2 explores the reasons for choosing the three educational frameworks from New Zealand, Australia and the ASEAN. Section 5.3 analyses the common dimensions across the three educational leadership frameworks that are appropriate for the Chinese compulsory schooling system. Section 5.4 analyses the additional competencies required by a Chinese educational leader which are not discussed in the three frameworks. Section 5.5 summarises the chapter.

5.2 Analysis of the Educational Leadership Frameworks from New Zealand, Australia and the ASEAN

5.2.1 A brief introduction of the three educational leadership frameworks

The *Competency Framework for Southeast Asian School Heads* was developed by the Southeast Asian Ministers of Education Organization (SEAMEO). This framework is the basis for designing and implementing school head learning programmes (Berlin-Chao & Francisco-Taa, 2015). The main reason for its inclusion is that this framework is widely accepted in Southeast Asian countries. SEAMEO has 10 member countries, including Brunei

Darussalam, Cambodia, Lao PDR, Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam, Timor-Leste and the Union of Myanmar. In addition, it also has associate member countries, including Australia, Canada, France, Germany, Netherlands, Spain, Morocco and the United Kingdom and New Zealand (Southeast Asian Ministers of Education Organization, 2022). SEAMEO has received increasing recognition from international institutions, agencies and governments, has a strong influence, and is well regarded in international education for its *Competency Framework for Southeast Asian School Heads*.

The *Australian Professional Standard for Principals and the Leadership Profiles* framework was developed to help principals and school leaders succeed in their work by focusing on three core leadership requirements and five professional practices. As this educational framework was developed by the Australian Institute for Teaching and School Leadership, it is a high-quality education policy that provides teachers and leaders with opportunities to impact every learner's educational growth and achievement positively. This document was established by consulting over 6,000 educators. The Australian Institute for Teaching and School Leadership works with many professionals such as teachers, leaders, systems, sectors, regulatory bodies, initial teacher education providers, principals and other professional associations (Australian Institute for Teaching and School Leadership, 2019). Therefore, The *Australian Professional Standard for Principals and the Leadership Profiles* is a well-utilised framework for the professional development of school principals in Australia.

Similarly, The Education Council of Aotearoa New Zealand is the monitoring body for the registration and standards of the New Zealand teaching workforce. The NZCER Act 1972 empowers the New Zealand Council of Educational Research to carry out and disseminate education research and provide independent information, advice and assistance (New Zealand Educational Council, 2018). New Zealand Council of Educational Research (2018) developed the *Educational Leadership Capability Framework* for principals, school leaders, middle leaders and teacher leaders. It is one of the most influential agencies in New Zealand.

5.2.2 The innovative thinking of the three educational leadership frameworks

Another important reason for selecting these three educational frameworks is their unique and innovative content. The *Australian Professional Standard for Principals and the Leadership Profiles* educational framework considers leadership from three areas: professional practices, leadership requirements and leadership emphasis. The leadership requirements include three elements for being a principal leader: vision, knowledge and personal qualities. Professional practices include the critical dimension of leadership practices for increasing leadership efficiency (Australian Institute for Teaching and School Leadership, 2019). This provides a unique way to understand educational leadership in this context.

The *Australian Professional Standard for Principals and the Leadership Profiles* framework considers the unique external context for developing leadership. It emphasises two external environmental variables: an inclusive Australian population and the rapidly changing global economy for individuals in developing knowledge (Australian Institute for Teaching and School Leadership, 2019). This is similar to China's educational context. Chinese principals enrol diverse students from different social backgrounds within their schools due to a rapidly changing global economy (Lai et al., 2017). This was a fundamental reason for selecting this framework as a guideline for developing the Chinese educational framework.

The New Zealand educational framework describes educational leadership occurring within three spheres: leading organisations, leading teams and leadership of curriculum or initiative. All three spheres comprise nine core competencies (New Zealand Educational Council, 2018). Therefore, this framework could help develop educational leadership in China by considering leadership capabilities in other leadership spheres within a school, such as the principal, middle leader or curriculum leader.

The *Competency Framework for Southeast Asian School Heads* is innovative as it interprets educational leadership not only from the personal excellence of principals, but also considers domains such as stakeholders' interests and management and strategic thinking and innovation. This provides a unique way of understanding educational leadership in the Chinese context.

5.2.3 The broad coverage of professional opinions

The three educational leadership frameworks comprehensively cover professional opinions. New Zealand's *Educational Leadership Capability Framework* is widely accepted by professionals in New Zealand. The framework also covers relevant government leadership guidelines such as Kiwi Leadership for Principals, Early Childhood Services Evaluation Indicators and the Education Review Office's School Evaluation Indicators (New Zealand Educational Council, 2018). This framework is reliable as its development involved consultation with many professionals.

In the *Competency Framework for Southeast Asian School Heads*, unappreciative inquiry approach was used with school heads and stakeholders. A total of 225 school heads and stakeholders determined what competencies they wanted to see in excellent school heads to keep schools developing and improving educational outcomes for students (SEAMEO Regional Center for Educational Innovation and Technology, 2015). This framework covers many useful ideas from principals.

In addition, the *Australian Professional Standard for Principals and the Leadership Profiles* framework includes opinions and views from authoritative experts. According to the Australian Institute for Teaching and School Leadership (2019), the educational leadership framework was developed based on Australian Council for Educational Leaders, Principals Australia Institute, New South Wales Department of Education and Communities, Rural Education Forum Australia and other authoritative institutions. Three frameworks were developed by government-funded institutions in collaboration with experienced principals and are valuable guidelines for helping develop an educational leadership framework for China.

5.2.4 An updated and recent educational leadership framework

The *Competency Framework for Southeast Asian School Heads* has been updated since it was created in 2003. This framework has been developed for principals in Asian countries, and for students, teachers and principals with similar backgrounds and contexts as China. The competency framework was updated in 2014. This version of the competency framework is the latest and contains much useful information (Berlin-Chao & Francisco-Taa, 2015).

5.2.5 Serving the purpose of assessing the performance of educational leaders in China

When developing an educational framework for Chinese principals in the compulsory schooling system, different levels or indicators that measure various aspects of a principal's performance must be considered. All three educational frameworks are suitable for assessing the competence levels of educational leaders. For example, The *Competency Framework for Southeast Asian School Heads* has three levels for each domain. The first level of taking strategic thinking and innovation contains three competencies: charting the school's strategic direction, making informed decisions and leading change and innovation. The second level is enabling competency. The third level is the indicators for each enabling competency (SEAMEO Regional Center for Educational Innovation and Technology, 2015). The three levels of competence, enabling competency and indicators, have helped inform the educational leadership framework for China. The *New Zealand Educational Leadership Capability Framework* proposes three leadership spheres for each leader. These three spheres are leading organisations, teams, and a curriculum or initiative which could provide a leadership pathway for Chinese principals.

The *Australian Professional Standard for Principals and the Leadership Profiles* include leadership requirements of emphasising the vision, personality and knowledge of leaders, professional practice, emphasising the positive culture of challenge and support among teachers, and emphasising the dynamic nature of the school leadership context (Australian Institute for Teaching and School Leadership, 2019). These lenses help researchers consider leadership from a leader's internal qualities and a leader's external context. These dimensions can support the performance of educational leaders in China.

5.3 Common Dimensions across the Three Educational Leadership Frameworks

5.3.1 Competence in strategic planning and implementation competence

The competence of strategic planning is evident in all three leadership frameworks from Australia, New Zealand, and the ASEAN. They all emphasise that principals should develop a shared vision in their schools and promote fairness, ethical practice and democratic values. Principals should also develop long-term strategic goals. Developing vision, values and goals requires the involvement of stakeholders such as teachers, parents, management and others

(Australian Institute for Teaching and School Leadership, 2019; New Zealand Educational Council, 2018; SEAMEO Regional Center for Educational Innovation and Technology, 2015).

The *New Zealand Educational Leadership Capability Framework* states that strategic thinking and planning are crucial educational leadership capabilities. The framework states that a leader should ensure organisational vision, goals and expectations for staff and learners, which must be shared within organisational communities and be focused on continual improvement and informed decision making. It also states that a leader should regularly review the progress of the vision and goals and support future actions (New Zealand Educational Council, 2018). The *Competency Framework for Southeast Asian Schools* states that strategic thinking and innovation are an essential domain for school leaders. This domain requires a leader to develop three competencies. The first is the strategic direction of the school. This requires a leader to develop a school's strategic plan by working with communities or stakeholders, leading followers to implement it, and illustrating the vision and values in daily work. The second competence is making informed decisions. This requires a leader to actively monitor, evaluate and support strategic planning and regularly review practice to address implementation concerns and issues. The third competence is leading change and innovation. A leader must use new approaches or systems to lead the change process and support creativity and innovation for school learning programmes (SEAMEO Regional Center for Educational Innovation and Technology, 2015). The *Australian Professional Standard for Principals and the Leadership Profiles* considers strategic planning as an essential component. It suggests making leadership actions contingent on the context and requires a leader to consider the strategic context and make changes based on this. The vision and value element requires a leader to lead the followers to develop the school's vision (Australian Institute for Teaching and School Leadership, 2019).

Competence in strategic planning and implementation applies to educational leaders in the Chinese context. This is because several leadership styles in the empirical literature on educational leadership in China indicate the importance of strategic planning and implementation. For example, Wang et al. (2020) suggested that principals' instructional leadership can improve teachers' well-being. An essential feature of instructional leadership is to lead members by creating a school vision and strategy and managing teaching projects

(Manaseh, 2016). In addition, transformational leadership also requires strategic planning and implementation competencies. This leadership style aims to inspire teachers to work toward organisational vision and goals, instead of leaders merely focusing on their immediate self-interests (Moolenaar et al., 2010). Hou (2018) posited that principals should develop a clear school mission and strategies for the future, taking teaching innovation as a critical element for organisational transformation and encouraging more teachers to participate in this process (Hou, 2018). In addition, the other four studies, Mao et al. (2017), Tian et al. (2021a), Li et al. (2018), and Tian et al. (2021b), also indicated the importance of transformational leadership to achieve educational leadership effectiveness. In addition, an element of transformational leadership is inspirational motivation. This requires a leader to share an appealing and inspiring vision with followers and optimistically communicate future goals (Gill et al., 1999). The empirical research discussed in Chapter 4 revealed the benefits of strategic planning competencies in China.

In practice, by synthesising the strategic planning and implementation competence of the three frameworks from New Zealand, Australia, and the ASEAN discussed previously, the strategic planning and implementation competence for public schools in China is expected of school principals. Chinese principals can perform this competency in a range of ways. The first way is to invite teachers, the community and other stakeholders to develop a mission and long-term strategy. This process also requires considering the external strategic context. The second way is to share the vision and long-term strategy with all teachers in the school and stakeholders for their feedback so that they can also become committed. Finally, the third way is by regularly reviewing the progress of the strategy implementation in each phase to ensure the actions are moving the school forward and showing improvement.

However, this competency needs to be adjusted to suit the Chinese context by inviting two organisations for their input. The first is the CCP. The main reason is that the branch secretary of the CCP plays a vital role in the core decision-making unit in China (Lai et al., 2017). The CCP branch secretary leads the schools' direction and development. Therefore, the strategic direction and related practice in China's compulsory public schools must get the CCP's approval. The second is to get approval from the local National Development and Reform Commission in China (NDRC). The NDRC is a government agency of the Chinese

Government. Its primary mission is to establish and implement national economic and social development strategies, long-term and annual plans, and industrial and price policies (United Nations Economic and Social Commission for Asia and the Pacific, 2015). The long-term strategic direction of public schools must get support from the NDRC at each local level. Therefore, the long-term strategic plan, implementation, and performance monitoring must get this government agency's support. This is an essential difference in China compared to New Zealand, Australia and other Southeast Asian countries.

5.3.2 Competence in stakeholder management and engagement

The second critical competency for educational leadership is stakeholder management and engagement. All three educational leadership frameworks consider the importance of stakeholders for principals to successfully lead a school. The *Southeast Asian Competency Framework* for principals considers stakeholder engagement as a critical domain for educational leadership. There are three requirements. The first is promoting shared responsibility for school improvement. This means building trust with different team players, promoting school improvement and empowering stakeholders to participate in school performance management (SEAMEO Regional Center for Educational Innovation and Technology, 2015). The second is managing educational alliances and networks. This requires an educational leader to communicate effectively with stakeholders, facilitate school community partnerships, and build a culture of respecting diverse viewpoints from different stakeholders. Stakeholders should empathise with others' views and avoid discriminatory views. The third competence requirement is to develop collaborative relationships with stakeholders. This requires school principals to work with stakeholders to launch community-based programmes and projects and regularly report on the school's performance to stakeholders (SEAMEO Regional Center for Educational Innovation and Technology, 2015).

New Zealand's *Educational Leadership Capability Framework* notes that school leaders should build up a sustained high trust relationship with stakeholders. This relationship is critical for knowledge and support. In addition, distributing resources to management for achieving goals also requires maintaining a positive relationship with stakeholders (New Zealand Educational Council, 2018). Similarly, the *Australian Professional Standard for Principals and the*

Leadership Profiles framework emphasises that principals should lead followers with a relational focus, concentrate on consultation and feedback and develop a positive relationship with students, staff, the local community and other stakeholders to achieve a shared culture and vision. Building such a partnership with the local community and external stakeholders is also the professional practice of a leader (Australian Institute for Teaching and School Leadership, 2019).

Stakeholder management and engagement competencies are helpful to educational leaders in the Chinese context. This is because it helps Chinese principals to consider the needs of relevant stakeholders, to satisfy their needs and to build high trust relationships with them. For example, the transformational leadership style is effective in China's educational leadership context (Hou, 2018; Mao et al., 2017; Li et al., 2018; Tian et al., 2021a). An essential dimension of transformational leadership is individuation consideration which requires a leader to consider an employee's individual needs and support followers to achieve their individual goals (Gill et al., 1999).

Moreover, Zhang and Mao (2020b) recommend that schools should provide resources and training support for teachers to improve their social and emotional learning. Furthermore, schools should ensure their teachers' social and emotional development and build a high trust work environment. These views indicate that a leader should consider followers' needs in schools. Chinese educational leaders should consider stakeholders', namely their employees', needs. However, a significant limitation is that current empirical research does not address other stakeholders such as the government, other schools, non-profit organisations, parents and the local community in China's educational context. However, these stakeholders are discussed in the New Zealand, Australian, and ASEAN educational leadership frameworks. External stakeholders such as the government, other schools, non-profit organisations, parents and the local community are also critical to developing the compulsory school environment in China. Cooperation and alliance among schools can assist in knowledge sharing and team communication.

In practice, Chinese principals can develop their competence in stakeholder management and engagement in three ways. The first way is to consider the needs of their employees. This is

critical to improving their well-being and job satisfaction and can motivate teachers to work toward the goals and achieve shared responsibility for school improvement. The second is building education alliances and networks, especially with other schools, companies and non-profit organisations. Chinese principals must communicate with them to promote knowledge sharing and share experience. The third aspect is to build up a high trust relationship with external stakeholders. The influence of Confucian culture on the Chinese is persuasive, and 13 Chinese dynasties established their political regimes using Confucius culture. Therefore, Chinese principals should learn to build relationships that acknowledge Confucius's cultural context. This is very different in terms of a cultural context for school leadership compared to New Zealand, Australia and the ASEAN.

5.3.3 Competence in promoting a learner-centred environment

The third key competence for educational leadership is promoting a learner-centred environment. In the *Southeast Asian Competency Framework*, an essential domain of educational leadership is instructional leadership. This requires leaders to develop a learner-centred environment. It includes three points. The first point is promoting learner-centred activities such as collaboration with teachers to address their learning problems, developing a comfortable environment for teachers in physical, social, and recreational aspects, encouraging lifelong and self-directed learning among teachers, and encouraging teachers to share their pedagogy and learning activities for the benefit of students. The second point is developing an inclusive learning environment and culture. This requires that learning resources and facilities are available to all teachers and students and that an inclusive mindset is adopted for different learning views. Two important features of current educational leadership practice in China are the use of positional power to influence followers and teachers and positional ability to control or supervise others in daily practice to achieve their goals (Yukl, 1998). Therefore, this requires educational leaders to actively take an inclusive mindset when promoting the learning environment or establishing motivational policies to encourage teacher participation. In this process, educational leaders should avoid using their positional power to punish others. This is because it proved to be less effective in China's educational context (Hou, 2018).

The third point is to establish some champions for students and teachers. These champions can encourage learning among teachers and students. This approach promotes a learner-centred environment. It encourages leaders to develop personal and professional learning networks for learners. It also emphasises collaborative relationships with other stakeholders to establish lifelong and community-based learning programmes to support teachers' growth. Leaders must construct a positive learning environment (SEAMEO Regional Center for Educational Innovation and Technology, 2015). This competence is also supported in the New Zealand *Educational Leadership Capability Framework*. It asserts that educational leaders should be capable of attending to their learning and their well-being. The leader should use new knowledge to challenge the thinking of teams and encourage followers to support their learning. The leader should also learn to use feedback and assess their own and their teachers' performance for continual personal growth and support of the teaching team.

Moreover, the leader should set aside some time each week to launch reflective activities to nurture the soul of followers and themselves. In addition, educational leaders should also actively contribute to sharing knowledge among followers and build new knowledge for professionals. In the *Australian Professional Standard for Principals and the Leadership Profiles*, an essential part of the professional practices of educational leadership is leading teaching and learning. It suggests that a leader should work with others to establish a professional learning community to support the continuous improvement of teaching and learning. In addition, a leader must also have strong learning aspirations to inspire staff, students and the community. Moreover, educational leaders should use professional learning programmes, either formal or informal, or local or international programmes to promote learning (Australian Institute for Teaching and School Leadership, 2019).

Promoting a learner-centred environment and consistent learning is helpful to educational leaders in the Chinese context. Wang et al. (2020) noted that a principal's instructional leadership directly improves teachers' well-being. In addition, it can indirectly raise teachers' collective self-efficacy and directly enhance their self-efficacy which will both improve teachers' well-being. According to Manaseh (2016), the critical point of instructional leadership practice is to promote teachers' teaching and students' learning behaviour through career development, cooperation with teachers on developing courses and teachers' feedback

(Alig-Mielcarek & Hoy, 2005). This indicates that promoting a learner-centred environment and consistent learning is essential for improving Chinese teachers' professional skills and knowledge. In addition, Gill et al. (1999) posited that the transformational leadership style is helpful in China's educational context as it can inspire teacher innovation. This requires school principals to actively share new teaching curricula and pedagogy and support teachers' new ideas, technology and equipment for innovation. In addition, principals who use transformational leadership should actively resolve work and life difficulties for teachers and be role models to influence teachers (Hou, 2018). Li et al. (2018) theorised that transformational leadership could positively contribute to teachers' emotional, normative, and continuance commitment. A component of transformational leadership is intellectual stimulation which requires leaders to challenge followers' ideas by sharing appropriate knowledge and generating more innovative ideas. It encourages creativity and learning in its followers (Gill et al., 1999). Therefore, a Chinese school leader should develop a learner-centred environment and promote continual learning. This is critical for improving teachers' commitment and innovation at work.

In practice, Chinese principals can develop the competence of promoting a learner-centred environment and continual learning in the following ways. The first way is to construct a supportive learning environment for Chinese teachers. This includes the physical environment, such as equipment, resources, and teaching facilities, and ensuring these are readily available. In addition, the leader should also construct an environment that supports learning. This includes developing a personal and professional learning network for learners, supporting informal or formal teaching experiences, sharing with followers, or creating champions for students and teachers. The second way is to develop an inclusive and respectful culture of respecting different opinions in China and embracing other ideas. New opinions may challenge the traditional views of teachers and leaders. The inclusive culture of China's compulsory schools is critically important and educational leaders must develop inclusive mindsets. The third way is to set aside time for followers to participate in professional learning programmes. Teachers' learning performance in these programmes should be evaluated. Teachers displaying high performance should be rewarded. The fourth way is to encourage teachers' or other

followers' lifelong and self-directed learning. Leaders should inspire followers to follow their interests and adopt self-directed learning.

5.3.4 Competence in emotional intelligence and communication skills

The fourth key competence for educational leadership developed from the three educational leadership frameworks is related to emotional intelligence and communication skills. A high level of emotional intelligence is critical for an educational leader. This means a leader can effectively understand followers' needs and adopt ethical practices and social interaction skills to resolve conflicts among parties and empathise with others. Due to their emotional intelligence, they can use the available evidence and information to inform and communicate the school's decisions to followers. Influential leaders clearly understand followers' needs and show empathy to them (Australian Institute for Teaching and School Leadership, 2019).

Similarly, the *New Zealand Educational Leadership Capability Framework* asserts that emotional intelligence and self-awareness are critical for building trusting relationships with others. A leader should also respectfully engage with others with empathy and humility. Openness and self-awareness are critical for the leader's success (New Zealand Educational Council, 2018). Moreover, practical communication skills should also support a high level of emotional intelligence. An educational leader should effectively communicate with followers. They should be good at listening to others and able to coach. They respond to others and give feedback. They can communicate, effectively negotiate, collaborate and advocate for all other stakeholders (Australian Institute for Teaching and School Leadership, 2019). The *Competency Framework for Southeast Asian School Heads* requires that a school leader has the communication skills to interact with different stakeholders by using appropriate language and ensuring clear, consistent and interactive communication (SEAMEO Regional Center for Educational Innovation and Technology, 2015).

Emotional intelligence and communication skills are helpful to educational leaders in the Chinese context. The research evidence shows that high emotional intelligence is a crucial moderator for teachers' well-being and commitment to the organisation. Tian et al. (2021a) indicated that SEC moderates the relationship between transformational leadership and teachers' well-being. Transformational leadership can positively predict teachers' SEC, and a

high level of SEC can control teachers' job burnout and raise teachers' job satisfaction (Tian et al., 2021b). Apart from transformational leadership, the emotional intelligence of leaders plays a moderating role in the relationship between authentic leadership and teacher and student relationship. It has a positive relationship with the emotional intelligence of teachers. The emotional intelligence of teachers and leaders can directly and positively predict teacher-student relationships (Zhang & Mao, 2020a). In addition, such an effect is also found in caring leadership. Research from Zhang and Mao (2020b) suggests that caring leadership can positively promote organisational culture in schools, which assists teachers' emotional intelligence development. A higher level of emotional intelligence also requires higher communication skills. Principals should realise their weaknesses, actively accept teachers' criticism, communicate with teachers and achieve effective mutual communication (Zhang et al., 2018). High emotional intelligence and communication skills would be appropriate for China's educational context.

Chinese principals or educational leaders can develop the competence of emotional intelligence and communication skills in the following ways. The first way is to actively collect evidence and information and care for followers' needs. A leader should actively establish communication channels with followers. This is because Chinese people have a high level of collectivist values and tend to express their individual needs to their leaders less. They are worried about impairing their harmonious human relationship with others if they express their individual needs. This is different from followers from a high level of individualistic culture (Truong et al., 2017). Therefore, in such a situation, a leader with high emotional intelligence must take action in communicating with teachers. The second way is to respect teachers or followers with empathy and humility. An educational leader must be open-minded to different views and take an inclusive approach to it. As servant leadership implies, a leader should respect and treat followers sincerely and responsibly (van Dierendonck, 2011). The third way is with strong communication skills. A leader in China's educational context should learn to interact with followers and colleagues effectively within a high-power distance cultural environment. A leader should actively listen to the different voices of followers. Clear, consistent and interactive communication is critical for building trust with followers.

5.3.5 Competence in resource deployment and management

The fifth key competence for educational leadership from the three educational leadership frameworks is effective resource deployment and management. This includes four aspects. The first is resource sharing and management with other schools and educational partners. Principals should know about the resources in different schools and their partner schools. They can share the resource with those partners (Australian Institute for Teaching and School Leadership, 2019). The second is to effectively allocate resources to support daily operations in schools and assess the impacts of those resources on students. For example, the Australian educational framework requires principals to use resources to actively maintain day-to-day operations in the professional practice of leading school management. A leader should manage school resources to support effective and safe learning for students (Australian Institute for Teaching and School Leadership, 2019). This requires a leader to find the best way to allocate resources across organisations and departments (New Zealand Educational Council, 2018). They also need to raise funds and manage financial resources to support budget planning for school improvements (SEAMEO Regional Center for Educational Innovation and Technology, 2015). The third key point is human resource management. A leader should make the school attractive to all teachers or faculty and effectively retain and motivate them. They should make the human resource policies practical and attractive (Australian Institute for Teaching and School Leadership, 2019). The fourth point is to use resources to support the school's vision and goals. A leader should learn to utilise money, time, and resources to support staff. Using the correct information and these resources, they can effectively allocate resources to support and match the strategic plan and goals (New Zealand Educational Council, 2018). A leader should ensure all human, material and financial resources are available to implement the plan (SEAMEO Regional Center for Educational Innovation and Technology, 2015).

Resource deployment and management competencies are significant for educational leaders in the Chinese context. Resource management is perceived as a critical skill for Chinese educational leaders. Principals should provide teachers and staff with enough resources to support their career growth and development. As Jiang and Li (2020) indicated, there has been a teachers' work fatigue problem over the previous 10 years. Therefore, school leaders are essential in providing teachers with work resource support and this is crucial to improve

teachers' well-being. Zhang et al. (2018) noted that leader-member exchange plays a moderating role between authentic leadership and teachers' voices in China's compulsory schools. Teachers want fair procedures for allocating resources and making decisions. Fair procedures can help develop authentic leadership that can promote teachers' voices in schools.

Moreover, schools in China should provide resources and training support for teachers to improve their social and emotional learning. If schools care for their teachers' social and emotional development, this will build a high trust work environment in China's educational system (Zhang & Mao, 2020b). Compared to schools in urban regions and high-quality schools, distributed leadership is poor in rural schools. Different allocation of resources is the main cause of such problems in these regions. Urban school teachers are more active in leadership due to more sufficient resources (Li et al., 2016). Moreover, teachers' commitment to change in urban schools is also higher than in rural schools due to insufficient resources (Li et al., 2016). These studies indicate that effective deployment and management are critical for educational leadership in China's primary and middle school context.

Based on the three educational frameworks, Chinese principals or educational leaders can develop resource deployment and management competence in the following three ways. The first is raising resources and sharing resources with networks. Educational leaders should raise financial and non-financial resources from local government and seek local governments' financial and non-financial support. The educational leader should develop partnerships with other schools, enterprises and businesses to exchange resources for their needs. The second is appropriate resource planning and allocating different school departments to support daily operations. This requires Chinese school leaders to consider different departments' needs and teachers' development and effectively allocate resources to those departments. This is critical for improving teachers' well-being and supporting their career development. The third is developing a long-term resource plan to support the school's vision and goals. Unlike Australia, New Zealand and other countries, the Chinese Government has a tradition of developing a 5-year plan for different industries and sectors. In Chinese public schools, educational leaders must develop their 5-year strategic plans and development. Therefore, educational leaders must learn to prepare different resources to support the 5-year vision and its implementation. This is quite important in Chinese compulsory schools.

Table 5. A comparison of educational leadership frameworks from Australia, New Zealand and the ASEAN.

Competency	Australia	New Zealand	ASEAN	Applicability in the Chinese context	The competency in practice
Strategic planning and implementation	Shared visions and values including fairness, ethical practices, democratic values, and lifelong learning	Substantial strategically planning and thinking to ensure organisational vision, goals, and expectations	Working with stakeholders in developing and implementing the strategic plan, and reflecting on changes	Highly applicable	(1) Inviting teachers and other stakeholders together to develop the mission and long-term strategy (2) Sharing the vision and long-term strategy with all teachers (3) Regularly reviewing the progress of strategy implementation
Stakeholder management and engagement	Engaging and working with the community; Developing others; Promoting innovation	Involvement in regional education and community to enhance local well-being	Managing alliances and networks and building up partnerships with stakeholders	Highly applicable	(1) Consider the needs of Chinese employees (2) Building education alliances and networks with other schools, companies and non-profit organisations (3) Building up trusting relationships with external stakeholders
Promoting a learner-centred environment	Working with others to establish a professional learning community, having strong learning aspirations, and using some professional learning programmes to promote learning	Using new knowledge to challenge the thinking of followers, using feedback to assess their performance, actively contributing to sharing knowledge among followers	Promoting learner-centred activities, encouraging lifelong and self-directed learning, establishing champions for learning among teachers	Highly applicable	(1) Constructing a supportive learning environment for Chinese teachers (2) Developing an inclusive and respectful culture of different opinions in the Chinese context (3) Setting aside time for followers to participate in professional learning programmes and inspire followers to learn their interests

Emotional intelligence and communication skills	Effectively understanding followers' needs and adopting ethical practices and social interaction skills to resolve conflicts among different parties, and having empathy for others	A leader should engage respectfully with others with empathy and humility. That openness and self-awareness are critical for the leader's emotional intelligence	Having communication skills to interact with different stakeholders by using appropriate language and ensuring clear, consistent and interactive communication	Highly applicable	(1) Actively collect information and care for followers' needs (2) Respect teachers or followers with empathy and humility and have an open mind to different views (3) Strong communication skills and learning to interact with followers and colleagues effectively under a high-power distance culture environment
Resource management	Resource sharing and management with other schools and educational partners, and using resources to actively maintain day-to-day operations	Finding the best way to allocate resources across organisations and departments. Effectively managing financial, human resources and property resources to support the strategic plan and goals	Raising funds and managing financial resources to support the budget planning for school improvement and ensuring all human, material and financial resources are available to implement the strategic plan	Highly applicable	(1) Obtaining resources and resource sharing with networks such as other schools, enterprises and others to exchange resources (2) Appropriate resource planning and allocation to different school departments to support daily operations (3) Developing a long-term resource plan to support the school vision and goals

Sources: Australian Institute for Teaching and School Leadership (2019); SEAMEO Regional Center for Educational Innovation and Technology (2015); New Zealand Educational Council(2018).

5.4 Additional Competencies that a Chinese Educational Leader Requires

5.4.1 High moral and ethical competence

Apart from the above five competencies, an additional competence for educational leadership in China is high moral and ethical competence. This means that a leader in China's compulsory schools should behave by a set of principles and values that most people expect. They should show good virtues, self-discipline, and unselfishness in leadership (Cheng et al., 2004). Although educational leaders' ethical or moral requirements are less discussed in the New Zealand, Australian, and ASEAN frameworks, moral and ethical competence is widely supported in China's empirical research in primary and secondary schools. For example, Tian et al. (2021a) pointed out that transformational leadership can improve teachers' job satisfaction. This is because it leads teachers by positively impacting their morale and relationships. Hou (2018) suggested that for transformational leadership to be effective, principals must behave in a highly ethical way and become positive role models.

Moreover, Zhang et al. (2018) indicated that the authentic leadership of principals can significantly impact the leader-member exchange relationship. At the same time, it also can positively promote teachers' voices at schools. The leader-member exchange can encourage teachers to express more opinions. The main reason for the effectiveness of authentic leadership is that it has four unique features: self-awareness, transparent relationships, internal moral value and coordination of different parties' interests. This requires high moral and ethical competence and builds trust between leaders and followers. In addition, Jiang and Li (2020) also concluded that servant leadership effectively controls teacher work fatigue and improves their psychological safety. This is because servant leadership shows a high work ethic and the spirit of helping others, and because of this, teachers establish high-quality human relationships. This makes teachers feel psychologically safe in the workplace. This indicates that high morals and ethics are critical components of success for servant leadership and other leadership styles. Thus, the empirical research of China's compulsory educational context clearly shows that high moral and ethical competence is crucial for educational leadership in China.

Chinese principals or educational leaders can develop high moral and ethical competence in four ways. The first is honesty and decency. An educational leader must not tell lies to

followers but treat all followers or colleagues honestly and decently to develop trust. All the information reported to teachers must be reliable. This is critical for building a trusting relationship (Mao et al., 2017). The second is high commitment to work with considerable effort shown at work. Educational work morale will improve when principals or educational leaders devote more effort to their work. This requires the leader to devote more time at work than their teachers and be a good role model. The third is supporting justice in the workplace and treating teachers transparently and fairly. School leaders should provide opportunities for advancement to teachers with no favouritism (Mao et al., 2017). The fourth is respecting others. For example, servant leadership involves respecting and treating followers sincerely is critical for raising teachers' well-being (Jiang & Li, 2020). Zhang et al. (2018) indicated that teachers' respect, trust, and encouragement help improve the leader-follower relationship. Therefore, this indicates that respect for teachers' different opinions and needs is an essential competency.

5.4.2 Understanding Confucian culture in China's educational context

Another key competence for educational leadership in China is to understand Confucian culture in China's educational context. The main reason is that in China, Confucian culture has dominated for over 2,000 years, and 13 Chinese dynasties used Confucian culture to support their political regimes (Lim & Thien, 2020). Even if China encountered a radical change to socialism, Confucian culture in China is essential, and it governs the way of social interaction among people. The three leadership frameworks also discuss cultural competence. Wang and Zepeda (2017) theorised that school culture is central to the core of teachers' influence on others. When a school has cooperation and a culture of mutual support, core teachers find it easier to lead team members to achieve goals.

Chinese principals or educational leaders can develop competence in understanding Confucian culture in two ways. The first is to restrain their authoritarian leadership style. The traditional leadership style in China has features father-son relationship. This means the leader takes an authoritarian role of guiding, supervising or controlling followers (Militello & Berger, 2010). This style negatively impacts followers' work participation and initiatives (Walker & Qian, 2020; Wang, 2016). Therefore, all school principals should restrain from using the authoritarian leadership style that is highly rooted in traditional Confucian culture. This is important for

achieving an effective leadership style. The second is the collectivist value and behaviours. This means that a leader should not be motivated by self-interest, but act for good and right things. They should try to think of others and forget self. According to Wang and Zepeda (2017), collectivism may better strengthen the influence of key teachers than rewarding individual achievements. This main reason is that rewarding individual achievement encourages competition and may negatively impair teachers' trust and the team's impact. Moreover, collectivist values and behaviours are also supported by servant leadership that emphasises employee-centred philosophy, focuses on followers' needs, and encourages resource sharing and active instruction to followers (Liden et al., 2014; van Dierendonck, 2011). Therefore, principals' collectivist values and behaviours are crucial for China's educational context.

5.4.3 A draft educational leadership framework for the compulsory schooling system in China

Based on the research in Sections 5.2 and 5.3, both English and Chinese versions of a proposed educational leadership framework for the compulsory schooling system in China are presented in Tables 6 and 7.

Table 6. English version of the educational leadership framework for compulsory schooling system in China.

Category	Competence	Definition	Main indicators of competency in practice
Key competence from New Zealand, Australia and ASEAN frameworks	Strategic planning and implementation	Developing a shared vision in their schools and actively supporting strategy implementation in the right way	(1) Inviting teachers and other stakeholders together to develop a mission and long-term strategy (2) Sharing the vision and long-term strategy with all teachers (3) Regularly reviewing the progress of strategy implementation
	Stakeholder management and engagement	Managing and balancing different stakeholders of schools and improving their engagement in school development	(1) Considering the needs of Chinese employees (2) Building educational alliances and networks with other schools, companies and non-profit organisations (3) Building up trustable relationships with external stakeholders
	Promoting a learner-centred environment	Building up a learner-centred environment for supporting different opinions and views and encouraging consistent learning for teacher development	(1) Constructing a supportive learning environment for Chinese teachers (2) Developing an inclusive and respectful culture of different opinions for the Chinese context (3) Setting aside time for followers to participate in professional learning programmes and inspiring followers to learn
	Emotional intelligence and communication skills	Understanding followers' needs, adopting ethical practices and social interaction skills to resolve conflicts among different parties, and empathising with others	(1) Actively collecting information and caring for followers' needs (2) Respecting teachers or followers with empathy and humility, taking an open mind to different views and taking an inclusive approach to it (3) Strong communication skills and learning to interact with followers and colleagues effectively under a high-power distance culture environment
	Resource sharing and management	Raising and providing teachers and staff with enough resources to support their career growth and development	(1) Raising resources and resources sharing with networks such as other schools, enterprises and others to exchange resources to their needs (2) Appropriate resource planning and allocation to different school departments to support daily operations (3) Developing a long-term resource plan to support the school's vision and goals

Category	Competence	Definition	Main indicators of competency in practice
Additional key competence based on the unique Chinese educational environment	Moral and ethical competence	Behaving by a set of principles and values that are accepted by the majority of the people for the common good purpose of schools	(1) Being honest and decent in treating all followers or colleagues (2) High commitment to work with higher effort (3) Supporting justice and treating followers transparently and fairly with no favouritism (4) Being respectful and inclusive of teachers' different opinions and needs
	Understanding Confucian culture	Clearly understanding the spirits of Confucian culture and behaving in that way	(1) Restraining their authoritarian leadership style to avoid negative influence (2) Adopting a collectivist value and behaviours and acting for the good and right things

Table 7.中文版中国义务教育学校的领导力模型及其核心要素.

类型	Competence	Definition	Main indicators of the competency in practice
源自新西兰、澳大利亚和南亚教育界的领导力模型的关键能力	战略计划与执行技能	为学校建立共同愿景, 并且积极支持战略沿正确的方向实施	(1)邀请教师和其他利益相关者共同制定学校使命和长期战略 (2) 与教职员共享并接纳学校愿景和长期战略 (3) 定期回顾战略实施进展, 确保战略实施向正确方向发展
	利益相关者管理技能	通过管理和平衡与学校相关的各类利益相关者, 推他们积极参与学校发展	(1)认真分析并跟进满足教师的各类工作需求 (2)积极与同行院校、公司和非营利组织建立教育联盟和网络 (3)与外部利益相关者建立可信赖, 可持续的发展关系
	构建以学习为中心的校园环境技能	建立一个以学习者为中心的环境, 包容尊重不同的意见和观点, 并鼓励教职员持续学习促进教职员发展	(1) 构建支持教职员持续学习的工作环境 (2) 创建包容和尊重不同意见的校园文化氛围 (3) 为教职员留出一定学习时间, 鼓励他们参与专业学习计划, 并激发他们不断为兴趣而学习
	情商和沟通技巧	熟悉了解教职工需求, 并有效地采用道德实践和社交技巧来解决各方冲突, 同时拥有很强的同理心	(1)积极收集相关员工需要信息, 并及时关注或满足教职工需求 (2)尊重教职工, 以谦逊的态对他们的各类观点或想法, 并对他们的给予很强的同理心和包容 (3) 沟通能力强, 学会在高权力距离文化环境下与教职工和同事有效互动
	资源共享与管理	积极为教师和员工争取足够多的各类资源, 以支持他们的职业成长和个人发展	(1) 积极为学校发展筹集资源, 与其他学校、企业等根据各自的资源特色, 形成有序的校企合作, 实现资源充分共享 (2) 根据各部门特点, 对学校资源进行规划筹划, 确保资源有效利用, 以有效支撑学校日常运营发展 (3) 制定长期系统的资源计划, 促进学校的愿景和目标的长期实施, 为其提供有效保障
基于独特的中国教育环境的关键领导胜任力	极高的道德和伦理水平	在学校的所作所为, 以促进大多数人共同利益为目的, 形成的一套原则和价值观	(1) 诚实正派地对待所有的教职员 (2) 对工作有较高的忠诚度, 在工作中付出更高的努力 (3)支持正义, 以透明、公平、不偏袒的方式对待所有的教职员 (4) 尊重和包容教师的不同意见和需求
	理解并执行儒家文化	清楚地理解儒家文化精神内涵, 并且知行合一的将儒家文化嵌入到日常领导行为中	(1) 在对待下属的过程中应减少作为领导者和父亲的双重权威角色, 对下属的权威控制力, 避免不好的负面影响。 (2)以集体主义价值观和行为进行领导他人, 一切为公

5.5 Chapter Summary

Chapter 5 presented a culturally appropriate educational leadership framework for the Chinese compulsory schooling system based on three educational leadership frameworks: The *Competency Framework for Southeast Asian School Heads*, the *New Zealand Educational Leadership Capability Framework* and the *Australian Professional Standard for Principals and the Leadership Profiles*. The main reasons for selecting these three educational frameworks were that these educational frameworks are expected to inform school leadership practice in their respective regions, contain a broad coverage of opinions, and are targeted toward a range of professionals. The three educational leadership frameworks contain innovative thinking and are recent. As a result, these frameworks can help serve the purpose of assessing the performance of educational leaders in China.

Chapter 6: Conclusion

6.1 Summary of the Research and its Significance

The Chinese compulsory schooling system plays a fundamental role in assisting students to achieve a healthy life and academic development. In order to ensure the continuing effectiveness of the compulsory schooling system and to better address educational leadership issues in China, culturally appropriate educational leadership framework for educational leaders in China was developed by building on three educational leadership frameworks from three countries

Based on the three educational leadership frameworks and China's educational practices and relevant peer-reviewed research, five standard competencies are recommended supporting China's educational leadership practice:

1. Competence in strategic planning and implementation – developing shared vision in schools and actively supporting strategy implementation correctly.
2. Competence in stakeholder management and engagement – managing and balancing different school stakeholders and improving their engagement in school development.
3. Competence to promote a learner-centred environment – building a learner-centred environment for supporting different opinions and views and encouraging consistent learning for teachers' development.
4. Competence in emotional intelligence and communication skills – understanding followers' needs and effectively adopting ethical practices and social interaction skills to resolve conflicts among parties and empathising with others.
5. Competence in resource sharing and management – raising and providing teachers and staff with enough resources to support their career growth and development.

Two additional competencies were discovered that a Chinese educational leader requires, but are not discussed in the three reviewed frameworks. However, these two competencies were essential to educational leaders in China's compulsory schools proved in the empirical research.

1. Competence in morality and ethics – behaving by a set of principles and values accepted by most people for the common good purpose in schools.
2. Competence in understanding Confucian culture –restraining their authoritarian leadership style by avoiding negative influences, adopting collectivist values and behaviours, and acting for good and right things.

This research is significant for both Chinese and Western audiences. Firstly, this research provides a new educational leadership framework for the Chinese compulsory schooling system. Many countries such as New Zealand, Australia and Southeast Asia have educational leadership frameworks, which are essential for developing their principals' competencies. This research is one of the first pieces of work to propose an educational leadership framework for China to help the Chinese Government, schools and educational associations to raise principals' leadership capabilities. Since the local government appoints educational leaders in compulsory schools, the framework may guide officials in selecting more suitable school leaders.

Secondly, this educational leadership framework is also helpful for individual teachers aspiring to become school leaders. This is because there are many compulsory Chinese schools in poor regions in China. Many educational leaders in those poor regions may not have developed a clear understanding of effective educational leadership practices. This educational leadership framework could help them learn how to develop their leadership practices.

Thirdly, this research is also helpful for Western researchers or education workers interested in understanding Chinese educational leadership practice. This is because this research systematically analysed 13 Chinese research articles on educational leadership and proposed Chinese educational leadership framework.

Fourthly, this research also addresses the research gaps in past research. Those research gaps are seldom consideration of the influence of the CCP on principals' leadership styles, seldom consideration of the influence of Confucian culture, and strategies for improving the professional skills or expertise of Chinese principals. This is another value for academic research.

6.2 Limitations and Future Research

This research has two limitations. The first limitation is only searching for peer-reviewed articles in Mandarin and Chinese academic journals from the CSSCI database. There were only 13 empirical Chinese articles related to educational leadership, which is a small sample size. This may impact the research findings and any generalisations that can be inferred. Further research could include research on China's educational leadership published in English academic journals. The empirical evidence and interpretation would be expanded considerably if such studies were included. This research also did not include non-peer-reviewed journals (i.e., grey literature, such as conference papers or research reports). Grey literature may also contain useful information on educational leadership in China. Therefore, an important direction for future research could be to increase the sample size, and the types of literature searched.

The second limitation is that this research only considers three educational leadership frameworks outside China. This research did not consider other leadership frameworks, such as those from Europe and North America. These two continents may have their own educational leadership frameworks, which could be highly valuable for educational success in those countries. If these educational leadership frameworks were considered, they may, to some degree, impact the research findings.

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