The Influence of Perceived Leadership on Teachers’ Job Satisfaction: A Comparative Study Between the United States and China

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THE INFLUENCE OF PERCEIVED LEADERSHIP ON TEACHERS’ JOB SATISFACTION: A COMPARATIVE STUDY BETWEEN THE UNITED STATES AND CHINA

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ABSTRACT

The challenge of teacher retention in rural schools is significant for many reasons, not the least of which is that teacher retention problems have been found to be negatively associated with school performances (Ronfeldt, Loeb, & Wyckoff, 2013; Tran & Dou, 2019). Teachers’ job satisfaction is closely related to teacher retention, both of which have been linked to students’ long-term learning outcomes (Chetty, Friedman, & Rockoff, 2014). Principals’ support for teachers has been frequently identified as the most important factor influencing teachers’ job satisfaction and retention (Ladd, 2011). Particularly in rural schools, leadership support, autonomy, professional development, and participation among stakeholders are the most important school level variables in determining the success of teacher retention and job satisfaction (Day et al., 2000; Darling-Hammond, 1999c; Hanushek, 2011f; Hattie, 2008e; OECD, 2018a; OCED, 2019b). However, few studies have examined the influence of perceived leadership support on teachers’ job satisfaction. Therefore, my study explored the influence of school leadership on teacher job satisfaction according to the perceptions of teachers. The purpose of this study was to examine the relationships among school leadership support and teacher perceptions of job satisfaction in rural schools. The study was conducted in two parts. First, this study examines how teachers’ perceived leadership support operates as determinants of teachers’ job satisfaction through a Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) models. Second, a qualitative approach has been conducted to explore more details on the perceptions of teachers. I interviewed
12 rural teachers in the United States, and 12 rural teachers in China. While investigating particularly at teachers’ perceptions on leadership support and its relationship links to job satisfaction, I compared the perceived leadership support to explore in what ways school leaders can support teachers and improve the teachers’ job satisfaction. I made recommendations and created a nascent comparative framework that links leadership practices and rural teachers’ perceptions of job satisfaction.

*Keywords:* leadership support, Teachers’ job satisfaction, rural schools, TALIS
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LIST OF ABBREVIATIONS

CFA ............................................................... Confirmatory Factor Analysis
ELA .............................................................. English Language Arts
ESSA ............................................................. Every Student Succeed Act
ESEA ............................................................. Elementary and Secondary Education Act
DL ................................................................. Distributed Leadership
ISCED1 .......................................................... primary schools
ISCED2 .......................................................... lower secondary schools
ISCED3 .......................................................... upper secondary schools
ISLDN ......................................................... International Successful Leadership Development Network
ISSPP ............................................................. International Successful School Principal Project
MOE .............................................................. Ministry of Education
NCLB ............................................................. No Child Left Behind
OECD ............................................................ Organization for Economic Co-operation and Development
TALIS ........................................................... Teaching and Learning International Survey
CHAPTER 1

INTRODUCTION

With teacher shortages in many countries, including the U.S. and China, there is growing interest globally in research on principal leadership and its influence on teachers’ job satisfaction and retention in the profession. A number of recent studies of distributed leadership have indicated a relationship to teacher job satisfaction and retention (e.g., Bennett, Wise, Woods, & Harvey, 2003; Camburn, Rowan, & Taylor, 2003; Elmore, 2000; Gronn, 2000, 2002; Harris, 2005; Ishimaru, 2012; Leeson, Campbell-Barr, & Ho, 2012; Ogawa & Bossert, 1995; Spillane, Halverson, & Diamond, 2001; Spillane, 2005, 2006). In particular, administrative support has been positively associated with positive teachers’ job satisfaction and retention. For example, one study in China found when administrators provided teachers with support, teachers became more dedicated to teaching, and students expressed appreciations of their effort, and parents showed them respect (Kwong et al., 2010). Another study in the United States found teachers who perceived support from principals worked closely with their mentors and colleagues to improve instructional and pedagogical skills (Ingersoll & Strong, 2011). Teacher satisfaction is considered influential in its relationship to school effectiveness and school outcomes as it is conceived as a key factor in improving school performances (Sargent & Hannum, 2005). Research on teacher job satisfaction has gained popularity, but few of them have made comparisons between the United States
and China. To make improvements in school performances, both the United States and China implemented educational policy regarding teachers’ leadership and job satisfactions (York-Barr, Duke, 2004). Compared to China, America started early in school leadership and teacher education program. In 2011, Teacher Leadership Exploratory Consortium made Teacher Leader Model Standards in the United States, aiming to improve teachers’ leadership skills, satisfaction, and teaching quality. China has also realized the importance of the developing qualified teachers and improving the job satisfaction of teachers. The Chinese Education Ministry has implemented several policies, such as Teacher Leadership Training Program in Shanghai in 2012, Excellent Teacher Evaluation Standards in 2018, and Teacher Education Revitalization Action Plan in 2022. These policies were implemented with the goal of improving teachers’ learning and leadership capabilities. From this comparative study, rural schools in the United States can benefit for teacher talent recruitment strategies from Chinese rural schools. The rural schools in China can benefit for teacher quality training, community engagement and professional development program from American rural schools. From comparing the studies between the United States and China, the understanding of the effects of perceived school leadership on teachers’ job satisfaction would deep and extended (Ouyang & Paprock, 2006).

At the same time, school administrative problems have been found to be negatively associated with teacher job satisfaction and retention, especially in rural areas where teacher shortages have been problematic for many years (Ronfeldt, Loeb, & Wyckoff, 2013; Tran & Dou, 2019). Teacher shortages and job satisfaction can influence students’ long-term learning outcomes (Chetty, Friedman, & Rockoff, 2013). Studies
have consistently documented negative effects of teacher shortage on student achievement (Clotfelter, Ladd, & Vigdor, 2009; Herrman, & Rockoff, 2012; Miller, Murnane, & Willet, 2008). For example, Herrmann and Rockoff (2012) show that ten additional teacher shortages led to 1.2% and 0.6% of a standard deviation decrease in math and English Language Arts (ELA) test scores, respectively. A question most often posed by these studies is how school leadership support teachers’ job satisfaction, and how the working environment, can mediate teacher shortage and retention problems. Yet teacher shortages remain.

With greater attention to teacher job satisfaction and retention in rural schools, there is an urgency to understand how to improve the teachers’ perceptions of job satisfaction and retention. Though research on teachers’ job satisfaction and retention in rural schools gained in popularity in the past decade, few studies have examined teacher perceptions of leadership support that contributes to their job satisfaction and retention. Additionally, few comparisons have made between different countries. With the trend of globalization, comparative studies of how rural school leaders support teachers contextualized in different countries have been called to researchers’ attention. Chinese scholars have been trying to understand the broad principles of school leadership development that could be learned from comparative study. Many Chinese educators had studied with John Dewy at Columbia University or at other American universities. There was huge interest in establishing modern Chinese schools. However, the concern was that most modern schools were in coastal area, and the rural areas were still lagged far behind. American scholars were aware of the importance of education the construction of world peace, equality, and cultural sustainability (Kennedy, 2004; Stevenson & Stigler, 1992;
Tobin, David & Dana, 1989), and comparative education studies with China would provide important contextual analysis to help wrestle with these difficult questions. Therefore, this paper aims to make a comparison of teachers’ job satisfaction and retention in rural high-needs schools between the U.S. and China, focusing particularly on school leadership support, teacher characteristics, and policy factors. Findings from this study will contribute to a new framework for teacher job satisfaction and teacher retention. This study will also contribute to comparative studies of teacher satisfaction and retention between the U.S. and China, focusing particularly on school leadership support, teachers’ characteristics, and policy factors, to propose a framework for teacher retention. This dissertation will contribute some insights in comparative studies of teacher satisfaction and retention between the U.S. and China, and potentially, shed light on the improvement of rural high-need schools, featuring teachers’ perceptions of their job satisfaction and retention as influenced by school leadership practices.

The concept of rural schools defined by the U.S. Census are designated in rural towns of 2,500 or fewer and unincorporated location in nonmetropolitan counties. Metropolitan counties are those including a city of at least 50,000 or whose adjoining counties have a highly urbanized population (Hobbs, 1994). The Census reported that 23% of the U.S. population lived in nonmetropolitan areas (Sherman, 1992). Although it is difficult to define a set of universal characteristics shared by these areas, many writers have identified some common features of rural communities and their schools. These include economic development, educational resources, social capital, and teachers. In rural areas with high poverty, some characteristics are including challenging facilities, a lack of external and internal resources, and low academic achievement (Giles et al.,
Fullan (2006) defined successful leaders in rural schools as those who turned around a low-performance school and made improvement in terms of student achievement. These schools usually have low student enrollment rates, high dropout rates, low teacher retentions, and a poor social reputation (Duke, 2011).

1.1 PURPOSE OF STUDY

Globalization has become a driving force of rapid and urgent educational changes. Society expects teachers to provide young people with the knowledge and skills they need to succeed in this highly competitive global economic market. Meanwhile, school leaders enable and support teachers to conduct teaching and learning. Over time, contemporary conceptualizations of school leadership have evolved from individualization to collaboration (Gronn, 2016), such as distributed leadership (Diamond & Spillane, 2016; Gronn, 2000, 2016; Harris & DeFlaminis, 2016; Spillane, Harris, Jones, & Mertz, 2015; Spillane, 2006, 2005; Woods, 2016). Most of the studies focused on leaders, but few were focused on the perceptions of rural teachers. This study aims to fill the gap of rural teachers’ perceptions of leadership support impacting their job satisfaction and efficacy as understood in two national contexts, China and the United States. It is important to examine how teachers themselves view leadership and its effectiveness of the leadership support on teachers’ jobs in rural settings where the teacher shortage is severe in many contexts, including the U.S. and China. The purpose of the study is threefold: to (a) identify leadership support features associated with teachers’ job satisfaction, including teaching experience, professional development, participation among stakeholders and working condition, and (b) compare the similarities, and differences between the U.S. rural school leadership and Chinese rural school leadership.
to promote long-term rural teacher job satisfaction and retention and (c) create a nascent comparative framework that links rural teachers’ perceptions of leadership job satisfaction and retention.

The long history of exchange and comparison between the American and Chinese education began with John Dewey during his two-years teaching in China (May 1, 1919-July 11, 1921). During two years of teaching in China, Dewey (1937) argued that the relationship between China and the West transformed him from being primarily an American educator into a transnational intellectual. Wang (2012) discussed how Dewey’s philosophical influence in China contributed to his evolving thoughts about internationalism and the distinction between democracy as a form of government and citizens as an ideal community. John Dewey influenced Chinese education in teaching, children growth and development, classroom management, administration, and psychology during the 1919 through 1921. John Dewey influenced the process of establishing modern Chinese schools. His philosophy of teaching for democracy emphasized the relationship between teachers and children. Teaching was a highly respected occupation that helped students to be more likely to become lifelong learners. Today, the latest official top economies in the world published by the World Bank in 2021 showing the United States’ economy is the largest in the world as measure by GDP, which is $20.89 trillion. China has the world’s second largest GDP in $14.72 trillion. With the annual GDP growth 2.3%, China may be on track to become the global powerhouse of economics in the world by GDP in the years to come. As Americans awaken to a rising China, China is now the second largest economy in the world, and industrial powerhouse, and its people live in increasing prosperity (Allison, 2017). Both
the United States and China have undergone a growing sense of entitlement and demanding a greater influence on the globalization of economy and education. However, the established powerhouse facing with challenges tend to become obstacles for mutual understanding. Without mutual understanding, misunderstandings are magnified, empathy remains elusive, and events and third-party actions would otherwise be manageable can trigger undesirable consequences. Thus, it is important to compare the differences between the United States and China, and to understand the fundamental differences in education, the role of school administrators, and relations among peers and teachers. According to OCED, with the enormous responsibility bestowed upon teachers, only 26% of them feel that society values their work (OCED, 2018b). Couple that with frustratingly large and stressful amounts of administrative barriers, which is an issue for one in two teachers, and suddenly, teaching doesn’t look so attractive as a career choice.

Thus, in order to know how leadership support influences teachers’ perceptions of job satisfaction, my study is guided by the following four research questions:

1. What are the relationships among discipline, collaborative relations, participation, and perceived leadership support for the rural teachers?

2. How do the relationships among learning environment, professional development, and autonomy vary between the rural teachers from the United States and China?

3. Does the country (the U.S.; China) impact discipline, collaborative relations, stakeholder participation and teachers’ job satisfaction?

4. How do the relationships among discipline, collaborative relations, stakeholder participation, learning environment, professional development, and autonomy that
impact teachers’ job satisfaction varying between the rural teachers from the United States and China?

5. How does leadership support affect teachers’ job satisfaction from the perspectives of rural teachers from the United States and China? And what are the similarities and differences in perceived leadership support on rural teachers’ job satisfaction in the United States and China?

The first three questions are primarily answered with quantitative methods; the fourth question is primarily answered with qualitative methods, and then the findings are integrated. More specifically, the quantitative study informs the qualitative study in a purposeful way. The qualitative methods introduce and provide a deep understanding of the problem of perceptions about leadership support on job satisfaction. The first three questions help us to see relationship and the influence of the country on the problem on teachers’ perception on leadership on job satisfaction and retention. The last two questions compare the commonalities and differences regarding the perceptions between the U.S. rural teachers and Chinese rural teachers.

1.2 DEFINITION OF TERMS

Autonomy: In this study, autonomy is referred to as target class autonomy for teachers (OECD, 2018). Target class autonomy is defined as numerous attempts to foster learner-centered pedagogies, such as facilitator, counsellor, or manager of learning resources. Teachers are indispensable, and their responsibility for teaching is to create and maintain a learning community. Learner autonomy depends on teacher autonomy (Little et al., 2003). If teachers stop teaching, most learners will stop learning. In the
pedagogical actions, the role of teachers plays in fostering the growth of learner autonomy will always be the nature of the pedagogical teaching dialogue.

*Disciplinary climate:* The construct of disciplinary climate is a classroom and school level phenomenon that is partly shaped by features of schools and communities (Ma & Willms, 2004). Disciplinary climate emphasizes the relationships between school characteristics, such as gender, ethnicity, family socioeconomic status and a wide range of organizational features at school levels.

*Participation among stakeholders:* stakeholders encompass governors, state board members, legislators, superintendents, principals, teachers, parents, and students. Participating among stakeholders in school governance engages the way of the improvement of school management and classroom environment (Cheng, 1996b), curriculum development and change (Baker & Begg, 2003), and the evaluation and assessment (Leithwood, Aitken, & Jantzi, 2001). These initiatives meet the needs of local community as well as the assurance of teachers’ job satisfaction and educational practices and outcomes.

*Rural Schools:* According to The National Center for Education Statistics (NCES), the rural school is located rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster. (NCES, 2006). Economically, rural areas have a higher proportion of low-wage, low-benefit jobs than do urban areas (Herzog & Pittman, 1995). Rural schools are more often underfunded and provide fewer opportunities to learn than schools in other communities due to a smaller tax base and lower property values (Herzog & Pittman, 1995). Rural schools often reflect the economic and social stratification of their communities and are influenced more
strongly than their urban counterparts by the cultural and economic outlook of the community (Seal & Harmon, 1995). Rural schools have not implemented technology to the same extent as nonrural schools due to lack of infrastructure and resources (Howley & Howley 1995). Rural schools can particularly socially engage communities and small schools, but they are more economically and educationally disadvantaged and have difficulty attracting high quality teachers (Bender et al., 1985; Sherman, 1992).

**TALIS**: The Teaching and Learning International Survey (TALIS) is a large-scale survey of teachers, school leaders, and their learning environments, with the first survey taking place in 2008. The survey is administered in lower secondary schools (ISCED2), as well as in primary (ISCED 1) and upper secondary (ISCED3) schools. The 2018 survey focuses on professional characteristics and teaching practices at the school and individual levels, such as teachers’ educational background and initial preparation; their professional development, instructional and professional practices; job satisfaction; issues of school leadership; feedback systems, and school climate. The survey provides scientific foundations for each area, as well as the major influences from related research in education at the OECD and beyond. I utilized TALIS 2018 in this paper to explore teachers’ perceptions on school leadership, and the influence of school leadership on teachers’ job satisfaction.

**Teacher Job Satisfaction**: Teacher job satisfaction in the field of education has been the subject of seminal and significant research in social science (Arnold, Cooper, & Robertson, 1998). A key finding has demonstrated that job satisfaction results in higher levels of teacher retention, as well as an increase in teacher attaining tenure (Bobbitt et al., 1991; Cockburn, 2000; Cohn, 1992; Meek, 1998). Conversely, as satisfaction
decreased, teacher attrition and absenteeism were shown to increase, revealing an inverse relationship between satisfaction and turnover (Bobbitt et al., 1991). Among beginning teachers, research suggests that one-third to one-half leave within their first 5 years (Ingersoll, 2003; Murnane et al., 1991) due to the increase in responsibilities and demands placed upon them (Billingsley & Cross, 1992), as well as lack of support financially (Murnane et al., 1991) and morally (Bobbitt et al., 1991).

**Teacher Retention:** Teacher retention has been found to be a good indicator of actual turnover, which is defined as the intent to remain in teaching (e.g., Bluedorn, 1982; Lee & Mowday, 1987). Previous research on teacher retention more generally indicates the power of affective responses, such as job satisfaction and commitment to the profession, on the intent to remain in teaching (e.g., Bobbitt et al., 1991; Meek, 1998; Murnane et al., 1991; NCTAF, 2002). Teachers’ job satisfaction, intrinsic and extrinsic motivators, their commitment, and intent to remain in the profession, and demographics are related to teacher retention.

**Teacher-student relations:** Teachers tend to spend considerable time and energy reflecting on and discussing the teacher-student relationship. Indeed, this seemed to be the element of teaching pedagogy to which they most responded. They engaged a “friendship strategy,” in which they worked hard to create a climate of friendship, trust, and equality inside the classroom. The social distance between teachers and students in a traditional classroom involves a hierarchical relation, which is the opposite of the kind of “freedom” for teachers and students. That social distance interferes with the educational process, especially if teachers desire to transform class structures as well as to increase students’ self-esteem and to help students to speak out more politically. In a friendly
relationship, teachers should encourage students to bring their experiences of social problems into the classroom.

1.3 REASONS FOR CHOOSING CHINESE RURAL SCHOOLS

Chinese rural schools have experienced documented improvements since the Open-Door Policy implemented in 1978. However, the rural high-need schools still wrestle with various problems such as the imbalanced educational resource distribution, insufficient educational investment, financial differences due to a hierarchical education management system, differences between schools’ due to people’s different levels of awareness about education between the rural and urban, and problems in the education evaluation system. Guo (2013) discussed both external and internal causes of the existence of high-needs schools in China. External causes include the schools’ geographical location, education investment from the government, school management, teacher quality, student population, and school reputation. Internal causes include China’s urban-rural centralized governance, the system of selecting key schools, management of education investment, and the urbanization of China.

One important reason for the existing high-needs schools in China is due to the fact that there is a lack of sufficient and equal financial support from the government. The financial gap between the urban and rural economic development causes the rural high-needs schools’ lack of sufficient funds (Zuo, 2013; Ma, 2013). Li (2007) also argued that the key school system has contributed to imbalanced resource distribution in compulsory education in China. Since 1949, China has placed most of its scarce education resources in key schools under the planned economy in order to educate an elite. In 1953, the Ministry of Education (MOE) announced the setting up of 194 key secondary schools,
which is about 4.4% of the total number of secondary schools in China. In 1978, the
MOE required cities to set up key schools at the city and county level, which were also
supported by more funds and teachers and students with higher teaching and learning
quality. The support from MOE for secondary education created rural schools at the
national, ministerial, provincial, county, and city levels. On the other hand, in most cities
20%–30% of schools are still high-needs schools. Some schools in rural and remote areas
do not have even basic operating conditions (Cheng, 2002). This imbalance in education
funding means that students cannot be guaranteed quality education in their own
*John Dewey in China: To teach and to learn*. The Confucius philosophy influenced
Dewey. Dewey perceived the Chinese culture and society offered a concept that he called
“metaphysics of experience” which was different from the U.S. pragmatic education
(Dewey, 1973). Dewey appreciated his own China experience during the two years and
two months (May 1919 to July 1921), and influenced the educational equity, democracy,
and reform in modern Chinese education. Dewey’s effort improved Chinese students’
literacy and educational quality through the cultural exchange with teaching and learning
in the early twentieth Century.

The basic education management system in China is another direct reason for the
emergence of rural high-needs schools. Basic education is the main responsibility of
provincial rather than central government, and therefore, the investment in basic
education mainly comes from the provincial government. The unevenly distributed
economic growth between the rural and urban areas caused the emergence of high-needs
schools in underdeveloped regions (Li, 2004; Jiang, 2007). This trend of unequal access
to opportunity is evident in education achievement where a growing gap has been documented in the performance of students from urban and rural backgrounds (Liu, 2009; Zhao et al., 2012). Divergences in the economic development level among provinces in China directly create differences in terms of basic education funding. Li (2004) stated that China lacks a mature evaluation system because up until this point, the evaluation system has not examined schools or individuals. The evaluation standards are too simple and cannot accommodate the diversity of different schools (Lu, 2006; Jiang, 2007). Ma (2013) argued that low school reputation and poor sources of students are also causes of high-needs schools. With poor social reputation, the achievement of high-needs schools cannot be recognized. At the same time, good students go to the better schools, leaving high-needs schools at a disadvantage. Ma (2013) further analyzed the family factors causing high-needs schools, stating that a lack of healthy family atmosphere, appropriate ways of fostering children, and proper ways of collaboration are reasons for the existence of high-needs schools. Scholars in China have also analyzed the internal reasons for the existence of high-needs schools (Jiang, 2007; Sun, Guo, & Sun, 2006).

1.4 REASONS FOR CHOOSING RURAL SCHOOLS IN THE UNITED STATES

The United States has a decentralized approach to governance, policy setting and funding of public education of among the UK, the European countries, and China. While the US rural schools have some characteristics with its history, culture, and policy, the Chinese high-needs schools show different perspectives of school leadership for high-needs schools. Despite increasingly high-profile federal legislation, education in the United States is constitutionally decentralized structured. Chinese rural schools have some characteristics with its history, culture, and policy. For example, Chinese rural
schools valued the Confucius harmonious community, and the culture does not celebrate American style individualism (Allison, 2017). While the American rural schools show different perspectives of school leadership for high-needs schools through state and governing systems. The decentralized school system in the U.S. has strong influence on public schools by the local school district funding and student partition (Wilmers & Ylimaki, 2021). State Education Departments delegate power and responsibility to local school districts that are overseen in turn by elected school boards. Recent school policies focus on evaluations and standardized tests. School board members, district and school leaders are under the pressure of meeting these accountabilities. John Dewey (1937) argued, there is a close relationship between education and democratic values, and standards have dominated recent policy discourse. Dewey understood education as essential to the American Democratic experiment (1937). He wrote:

> Education is not preparation for life, but education is life itself. Schools are preparing the youth of the country for active, intelligent participation in the building and the rebuilding the democratic society. The tradition of democracy should be embodied by active effort in the social relations in which we as human beings bear to each other under present conditions. The only method by which human beings can succeed in carrying on the humanity is through mutual respect, mutual understanding, give and take and the polling of experiences of living together (1937, p. 56).

In the United States, public education has played a significant role in the development of citizen’s identities and reflecting society and its political governance system (Wilmers & Ylimaki, 2021). Local and state governments have been responsible
for education. The federal government historically has taken a divided sovereignty role in education (Grodzins, 1966). The state’s large geographic size and the design of the constitution contributed to layering power of local control (Mitra, 2018). Education has long been considered as primarily a responsibility in which governments attempt to address social issues, such as accountability, equity, and political and social reform (Mitra, 2018). For example, the Great Society reforms in the 1960s included the advocacy of the Elementary and Secondary Education Act (ESEA) of 1965. The intent behind the legislation was aimed to fund students in poverty with the idea that increasing tutoring and one-on-one assistance could lead to improved learning outcomes, which would help these children could get out of poverty. ESEA was a mechanism to raise and increase funds to low-performing children in poverty (Jennings, 2015). Schools were required to take an annual look at the effectiveness and schools that didn’t make progress are required to develop improvement plans (Klein, 2015).

The funding of education in the U.S. follows a decentralized pattern. On average, school districts receive 48% of their resources from the state and 45% from local taxes. Although the federal government provides only 7% of educational funding on average, its influence upon accountability policy through legislation purporting to seek higher standards of student achievement has been profound. In 2002, the federal “No Child Left Behind” (NCLB) Act required states to administer annual benchmarked proficiency tests in reading and math to all students in grades 3–8. Schools failing to make adequate yearly progress (AYP) toward 100% proficiency over a two-year period are deemed in need of improvement and become eligible for additional federal school improvement funding (Jennings, 2015). School leaders throughout the country are facing mounting
accountability pressures to improve student achievement and turn around their lowest performing schools. More and more schools are failing to reach adequate performance on a yearly basis (Jennings, 2015). Although progress targets under the Elementary and Secondary Education Act (ESEA) and waivers to ESEA and discussions about reauthorization of the policy are changing the specifics of accountability pressures, it is clear that federal policies will continue to hold the accountability for schools’ performance (Klein, 2015). Rural schools usually impact more if they fail to meet the accountability for school performance due to the school often being the one community hub in a sparsely populated region. With the rural school usually as the focal point of an area, the morale of the community can struggle. Schools serve as markers of social and economic viability and failing to meet the accountability can have unintended consequences in terms of declining property values and reduced business opportunities (Brown & Schafft, 2011; Tieken, 2014).

Many policy makers have proposed prioritizing rural schools to address the issue of chronic low performance (Center for Public education, 2018). In particular, turning around the lowest performing five percent of schools is a priority for the Obama administration (Duncan, 2010). Unlike incremental school improvement, transforming rural schools expect changes such as replacing the principal and/or staff and providing increased flexibility from current policies to produce significant achievement gains in a very short period of time (usually with two to three years), followed by sustained improvement over the long run. Turnaround is defined as a complete intervention in a low-performing school (Kutash, Nic, Gorin, Rahmatullah, & Tallant, 2010). Schools identified as turnaround schools entail producing substantial achievements in two years.
and transforming the school from low performance into a high-performance organization.

Accountability pressures from the state and federal government enabled these principals to move the school beyond mere direction setting, because data from mandatory standardized testing and the threat of state-imposed sanctions provided both a sense of clarity and urgency about student achievement. Principals capitalized on this clarity by shaping the school’s instructional program around the achievement of clearly defined goals related to student mastery of literacy and mathematics skill acquisition. They knowingly used state testing to leverage their own high expectations for student and faculty performance. For example, Ylimaki (2007) analyzed four case studies in U.S. schools where principals focused their efforts beyond teaching by helping their teachers implement an improved school climate. Yet, other U.S. schools in the ISSPP project concentrated more on improving test scores and standardized instructional programs. Johnson (2007), in her examination of culturally responsive leadership practices in the U.S. case study schools, questions what constitutes “outstanding” for teachers teaching in high poverty, challenging schools. Further analysis of the case study data has led some members of the US research team to question how high stakes testing and accountability in rural schools not attending to job satisfaction because it is important to mitigate teacher retention. However, studies about teachers’ perceptions of job satisfaction and how to mitigate teacher retention are limited (e.g., Caprara et al., 2006; Duffy & Lent, 2009; Gronn, 2000; Ingersoll, 2003; Lent & Brown, 2006; Lent et al., 2011).

According to one OCED study on the Global Teaching Insights (OECD, 2018), school leaders may make the job of teaching more collegial by encouraging more professional collaboration among teachers at the same time, and teachers would build
self-efficacy and confidence in teaching rural students. In 2018, roughly 1 in 5 teachers did not believe that they work in a collaborative culture, and only 28% run classes as a team at least once a month. The study also found that almost three quarters of teachers who received feedback on their work found it useful for improving their practice, suggesting that a growth mindset among teachers can help develop an ecosystem of continuous peer learning, and we can boost that ecosystem by improving teachers’ perceptions of the leadership support, so the teachers are recognized for their efforts (OECD, 2018).

1.5 SIGNIFICANCE OF THE STUDY

Understanding the relationships among school leadership support and teacher perceptions of job satisfactions in rural schools may help address the teacher shortage and teacher retention problems. Yet only a few case studies (Camburn, Rowan, & Taylor, 2003; Gronn, 2000, 2002; Spillane, Halverson, & Diamond, 2001) have examined the rural teacher perceptions of job satisfactions among leadership support with a focus on the factors of teachers voices that might drive to better understand their preferences and choices. Strauss and Strauss (2003) provide some evidence that discipline in school climate, safety, and daily pay are among the most important factors for teachers’ decision making, while the attitudes of professional staff and whether a position can advance their professional development can also influence their retentions. None of the studies to date comprehensively assesses the composition of the relationship among principal support, teacher perceptions of school job satisfaction, and how schools vary in teacher shortages in rural areas across countries between the United States and China, or what factors drive the observed patterns for rural teacher shortage.
China has gone through educational reform past decades and has made improvements for recruiting qualified teachers, but still need to retain qualified rural teachers due to the development gap between the urban and rural area and many teachers flocked to urban schools. Teacher retention is a growing concern in China due to the opening of labor market has created alternative career paths for current and potential teachers (Sargent & Hannum, 2005). The opening of labor market has made the economic resources unevenly distributed to schools in different locales. Good teachers are gaining greater flexibility to leave current schools and move to better school districts.

Similar situation happened in the United States. According to the National Center for Education Statistics, teacher turnover, as measured annually by the combined percentage of “movers” and “leavers,” after five years was 46 percent, with 29 percent of teachers moved schools or districts and 17 percent stopped teaching (NCES, 2016). Thus, this study on how the school administrative support to teachers’ job satisfactions between the United States and China has practical purposes. First, comparative insights and experience of leadership practices can provide additional thoughts for school leadership on school improvement and education reform. The rural schools in the United States can benefit for teacher talent recruitment strategies from Chinese rural schools. The rural schools in China can benefit for teacher quality training, community engagement and professional development program from American rural schools. Second, the reform of education makes school leaders and teachers change roles of management. School leaders and teachers have multiple hats. They are not only responsible for the overall students’ performances, but also need take active roles in school decision making, and leadership capacity building, and management participation. Both the school leadership research and
practice in the United States and China can benefit from comparative studies, and to deepen the influence of school leadership on teachers’ job satisfaction from the proposed framework of multi-level leadership practices on teachers’ job satisfactions (Ouyang & Paprock, 2006).

This research extended the studies for factor analysis on how perceived school leadership influencing teachers’ job satisfaction. Previous studies about perceived school leadership on rural teachers’ job satisfaction are based on one factor analysis or linear regression analysis, which lacks school and organizational level for exploring the teachers’ job satisfactions. This study filled the gap using school level factors exploring the perceived leadership support from school leaders and how the school leadership support effects teachers’ job satisfaction and introducing Bandura’s social cognitive theory from an educational psychological perspective exploring the relationships among school disciplinary climate, autonomy, relations, professional development, and extended the previous literature of leadership practices to teachers’ job satisfactions to rural teachers between United States and China.

1.6 LIMITATIONS OF THE STUDY

My research has a few limitations that should be taken into consideration. To begin, given this study’s particular focus and scope, I collected American teachers interview data in the summer of 2018. However, due to the pandemic disruption, I collected the Chinese teacher interview data virtually in the summer of 2021. As time passes, it is possible that their teaching experience and perceptions may change. Thus, my results do not necessarily capture the kind of transformations of teacher perceptions that potentially take longer to complete. Second, while my study features a robust number of
interview participants, given my study’s focus on the general essence of the phenomenon, I do not set out to examine distinct subgroups of teachers based on background characteristics, such as race, gender, and other demographics. Accordingly, my study yields a common structure of the phenomenon under investigation with our sample, and future work needs to focus on important subpopulations of diverse teacher populations to reveal the potential nuances and differences in the experience and self-perceptions of teachers across the United States and China.

This dissertation is organized in five chapters. The first chapter includes an introduction as well as background, purpose of study, research questions, definition of terms, reasons for comparison between the rural U.S. schools and rural Chinese schools, the significance, and limitations of the study. Chapter two presents a literature review comparing the policies, school leadership, teaching pedagogy and curriculum development between the U.S. rural schools and Chinese rural schools, including specifically a review of the influence of school leadership support on teachers’ job, relationships, and working condition as well as creatively proposing a conceptual framework within two theories (social ecological theory and social cognitive theory). Next, chapter three details the methodology of the quantitative study and qualitative study, and chapter four discusses the results of the research. Lastly, chapter five concludes the study with discussion of implications and possibilities for future research.
CHAPTER 2

LITERATURE REVIEW

Understanding teacher perceptions of leadership support can provide insights to help raise teacher job satisfaction and retention for a sustainable improvement in rural schools. In this chapter, I discuss the literature that informed my study. I first discuss previous studies on policy definitions of rural schools in the United States and compare the previous research on policies and rural schools contextualized in China. I then review the existing research on school leadership, including literature on distributed leadership. I introduce a multilevel leadership approach suggested by distributive leadership that has been linked to teacher job satisfaction and retention. I then discuss the Chinese cultures in the contemporary society and the need of study school leadership in the context of different cultural philosophy to support teachers across geographical boundaries. I also discuss my conceptual framework using Bandura’s (1997) social cognitive theory and Bronfenbrenner’s (1979) Ecological System Theory (EST). By thoroughly reviewing previous studies, I seek to highlight the needs and significant of this proposed study.

2.1 RURAL SCHOOLS IN THE U.S.: POLICY DEFINITIONS

In the United States, one definition of “rural” can categorize through a variety of communities. The critical factor in categorizing and understanding rural communities is that they are fundamentally nonmetropolitan in nature (NCES, 2007). Rural schools have their own unique challenges. Rural students face high levels of poverty and are often taught by less academically prepared teachers. In the 1970s and 1980s, the school
improvement movements aimed to help poor and minority students in low-preforming schools by creating a safe, equal, and organized school environment and successful educational outcome (Duke, 2012). In the 1980s, a new solution called “reconstitution” for low-achieving schools was tested in San Francisco. In the 1990s, the development of whole-school reform models and incentives for their use made schools to propose plans to increase student achievement with the implementation of No Child Left Behind (NCLB). NCLB forced school reform by becoming test score accountability (Jennings, 2015). In the 2000s, the Obama administration launched a nationwide competition Race to the Top (RttT) aimed to adopt state standards and to improve the lowest performing schools by giving grants to several schools which are using test scores as a significant factor in evaluating teachers and to consider the implementation for the Common Core Standards (Jennings, 2015). American Recovery and Reinvestment Act of 2009 (ARRA) was along with this massive spending package for education. In addition to Race to the Top, ARRA transformed the scope for federal school improvement Grant (SIG) program (Mitra, 2018). In this grant, the Obama administration announced a plan to support the improvement of the most failing schools in the nation by using the SIG program to provide support to the nation’s 5000 funding requiring reforms at the school level. Fitting with the market-driven reforms of the business world, this vision involved massive layoffs of teachers and administrators with the assumption that a school could be shut down and restructured as a new organization with a new outcome in the same geographical space (Trujillo & Renee, 2015). The Obama administration called the concept “turnaround schools.” In the final year of the second term of the Obama
administration, Every Student Succeeds Act (ESSA) kept most of the standardized testing system intact.

The popular perception holds that education reform is largely directed toward the needs of underserved populations (Johnson, Mitchel, & Rotherham, 2014). Yet the specific needs of rural communities are often overlooked in policy discussions. Both teachers and principals in rural areas have limited access to quality professional development, further hampering the potential for rural schools to grow and develop effective educators. Districts, facing budget cuts and pressured to share limited resources, have turned to consolidating schools, creating burdens on students and family life.

2.2 RURAL SCHOOLS IN CHINA: POLICY DEFINITIONS

The definition of “rural schools” in China has a broader context beyond locations. The improvement and development of Chinese rural education reform is an ongoing issue that has been studied by many scholars. The Chinese educational system has a centralized governing system which differs from education in the United States, and collectivity has supremacy over individual interests, a legacy from the cultural heritage of the past (Wong, 2008). While few researchers have explored the transformations of rural schools in Chinese rural areas, the idea of rural high-needs schools exists in some schools that meet the minimum requirement/assessment/standard (Sun et al., 2006). Furthermore, few scholars have explored deeply about how different the school leadership capacities would be compared to the different educational systems in the West and Asia. In addition, the core values concerning leadership held in Asian are different from Western countries. Western countries emphasize more on democratic education, while in China, the traditional values and Confucian ideals and practices emphasize the importance of family,
the community, and the respect for authority with a pragmatic attitude. To study the leadership in high-need schools, it is important to first understand the cultural, economic, political, and social context in China.

Like other nation states, educational reform in China has always been situated in the social, cultural and economic context. Chinese educational system was rebuilt after the Cultural Revolution (1966-1976) in 1976, and a national high school exam was introduced in 1977. Modern educational reforms started in 1985 focusing on exam-oriented education when the Chinese leadership Xiaoping Deng addressed the need to develop intellectual talent through educational reforms. From 2000-2010, curriculum reform in China promoted quality-oriented education. The quality-oriented education included the curriculum and teaching reform, innovating teaching content and teaching methods, leveraging the students’ learning ability, and practical ability and innovative ability (Tan, 2013). The quality-oriented education policy impacted teachers’ curriculum designing and pedagogy, because this policy required the curriculum includes not just the actual exam subjects but new subjects, including programs and activities to meet the students’ learning interests and abilities. In 2010, a student-centered form of learning implemented to develop personal autonomy and collaboration (Ministry of Education, 2011). Learner-centered pedagogies are included small-group discussions, individual project work, debates, and fieldwork. The learner-centered reform in China shifted the traditional curriculum objectives with topics listed in the syllabus to be tested in exams in the past, to curriculum as classroom activates, innovation, creativity inquiry and community engagement. Though the student-centered policy acknowledged that the quality of education is more important than test-oriented education, due to the uneven
economic development between the urban and rural China, test-oriented education still gets the real attention (Tan, 2012). Rural schools have difficulties to retain qualified teachers and have limited capacities to customize and develop their education programs (Zhao & Qiu, 2012).

China’s economy and its citizens’ incomes have grown steadily for four decades reform. The absolute GDP increased on average 9.8% and the per capita GDP 8.6% each year between 1979 and 2017. However, the urban-rural gap, one of China’s major problems in economic and social development has enlarged. The income gap between the urban and rural area has widened dramatically and is also manifested in the provision of infrastructure, education, health care and social insurance (Ye, 2010). According to UNESCO, the average education investment worldwide is 5.7% of national GDP. From 2000 to 2002, China’s education investment was 2.79%, 3.19%, and 3.3% of national GDP. This is lower than most other countries in the 1980s and far from the 4% goal set in the “China Educational Reform and Development Framework” which was released in 1993 (Li, 2004). Another number from UNESCO shows that, in 2005, the average education investment worldwide was 4.9% of national GDP. In 2007, China’s education investment was only 3.32% of national GDP (Yuan, 2009). These numbers are also reflected in a study on cities’ contribution to education investment that was conducted by Lin and Cheng (2009). They found that although GDP per capita in Asia was 70% of the world average, public funding for basic education per capita was only 58% of the world average. The Chinese literature has extensively discussed the underlying reasons for the existence of high-needs rural schools in China. Liu (1999) discussed the historical and practical causes of high-needs rural schools in China. The historical reasons include
financial and policy limitations. The practical causes include changes in economic development and the labor market, inequity in the financial situation of different areas in China. The unevenly distributed social resources have brought the inequity of educational performance. G. Q. Li (2005) stated that the high-needs rural school phenomenon is an education problem. It is also a social problem as it has strong roots in historical and social issues.

Scholars have argued that the weaknesses of rural schools can be categorized in terms of “hardware” and “software” (Wu, 2012). In terms of “hardware,” weaknesses are mainly shown as limited resources, a poor school environment, small schools, overloaded facilities, limited education resources and poor library facilities. In terms of “software,” the weaknesses can be seen in poor school leadership, poor management, weak teaching teams, low student quality, and low quality and effectiveness of the school administration. Guo (2013) stated that the economic development of Chinese society has brought about an evolution of weak schools into a new stage. From a management perspective, Guo defined the concept of high-needs schools in terms of significant improvement in compulsory education in a specific time period and location. However, even if a school has been “turned around,” the school environment may still be relatively weak, and the reputation of the school may still be low. This definition is derived from the perspective of societal development and education implementation in a modern urbanized environment.

2.3 SCHOOL LEADERSHIP RESEARCH

Teacher leadership, especially distributed practices, has been found associated with teachers’ job satisfaction in Western countries. Teacher leadership has been
continuing research in the effective school literature (Diamond & Spillane, 2016; Hallinger, 2011a; Harris, 2005). Spillane (2016) has a multi-level leadership approach of understanding of how distributed practices are accomplished within a school setting. Diamond and Spillane (2016) argued that distributed leadership is a conceptual framework that has three operationalized forms emerging in a school setting: a collaborative, a collective, and a coordinated process. The three processes work together to accomplish the school’s mission (Spillane, Diamond, & Jita, 2003), and they also define the rules of engagement that facilitate how distributed leadership incorporate throughout the school. Spillane, Parise, and Sherer (2010) demonstrated that the principal-teacher relation and interaction can transform a school’s organizational structure using a collaborative, collective, and coordinated process because the school can be defined as a distinct organization with systematic routines that help school maintain direction and transparency to management practices. Although Spillane, Parise, and Sherer (2010) defines the rules of engagement that facilitate how distributed leadership permeates throughout the school, the study did not necessarily explain the how teachers perceived to their working condition and job satisfaction.

Besides teacher leadership with distributed practices, there is also an abundant literature on school leadership practices that contribute to improved learning outcomes as well as job satisfaction in rural schools. Reviews of International Successful School Principal Project (ISSPP) case studies in rural schools, including many schools with high percentages of underserved students and even schools that effectively attained a “turnaround”, have consistently documented the positive effects of school leaders on school improvement. Furthermore, The International School Leadership Development
Network (ISLDN) has been studying effective school principals in high needs schools around the world. To date, much of the research from ISLDN and other related leadership studies has focused on schools in western democratic contexts with a different cultural context for leadership. Currently, the ISLDN researchers are analyzing school leadership in Europe, North America, and South America, yet there has not been much research in Asia analyzing Asian school leadership. These case studies argue that successful rural school principals adapted the administrative support by awareness of their schools and teachers’ needs (Jacobson, Johnson, Ylimaki, and Giles, 2005; Jacobson, Brooks, Giles, Johnson, and Ylimaki, 2007; and Mulford et al., 2008). Importantly, they found that successful school leaders understand the school climate in which they work and can navigate the various leadership practices to support teachers in context-responsive ways (Klar & Brewer, 2013, 2014; Klar, et al., 2019b). The findings revealed a lack of principal leadership support and contextual barriers in rural schools as hindering interest in teacher retention, regardless the rural teacher salary deficiency was insurmountable. In other words, effective leadership in high-needs schools has been a widely discussed topic in the US and other countries. From the regional level to the national level, governments in the U.S. and other countries have taken diverse approaches to transforming high-needs schools. In order to sustain a school’s improvement, evidence also shows the importance roles of school districts, the government, and the principal that are focusing on leadership training and teacher professional development (Camburn, Rowan, & Taylor, 2003; Elmore, 2000; Gronn, 2000, 2002; Harris, 2005; Higgins, Ishimaru, Holcombe, & Fowler, 2012). However, there is little attention on teachers’ perceptions of the distributed leadership on their job satisfactions across this literature.
Furthermore, few research has delved deep into a comparative perspective on rural schools globally. The study aims to extend the current literature on leadership influence on rural teacher retention and job satisfaction, to help researchers to have a global understanding and provide useful strategies utilized for school improvement.

Effectiveness school leadership studies were conducted in the wake of the Coleman Report from the 1960s through the 1990s. Edmonds and Lezotte (1974) and Edmonds (1979) analyzed effective schools by exploring questions whether schools are instructionally effective for rural children by looking at both the relationship between students’ family background and their academic scores. They pointed out that learning outcomes, such as standardized tests are not the only element to measure the achievement, but the improvement of students’ overall wellbeing should also be included in the purposes of education. Effective schools had well-coordinated curriculum, effective teachers, and supportive principals. These schools emphasized the achievement of basic reading and math skills, and the principal coordinates the curriculum across classrooms and encouraged high degrees of interaction among teachers on curriculum issues (Venezky & Winfield, 1979). The curricular coordination entails the articulation of the curriculum across grade levels (Hallinger & Murphy, 1985). Instructional management, curriculum resources, and assessment measured by school are aligned with these instructional objectives (Colley & Leinhardt, 1980; Levine, 1982; McCormack-Larkin & Kritek, 1982). Besides their primary focus on the development of curriculum, studies indicate strong school leadership support. Principals in effective schools develop a clear school mission, monitor student progress, protect instructional time from interruptions, and maintain high standards for teachers and students (Bossert et al., 1982;
Murphy et al., 1983). Leadership support is largely regarded as a key factor in contributing to teachers’ different perceptions on job satisfaction, efficacy, and in the success with which schools foster the learning climate (Leithwood & Jantzi, 2000). Some of the more recent scholarship emphasized the importance of school leadership support that emerged from international research networks such as the International Successful School Principals Project (ISSPP) and the International School Leadership Development Network (ISLDN). Scholars from ISSPP and ISLDN identified both nationwide and cross-national effective school leadership practices. Though numerous scholars associated with the ISSPP and the ISLDN have conducted research on effective leadership in high-needs schools, few of these scholars have compared specifically on successful leadership in rural contexts between the U.S. and China, where leaders encounter unique social and cultural challenges (Gurr, Drysdale, & Mulford, 2016).

Effective school leadership models were developed further by Leithwood and his colleagues (e.g., Leithwood, Louis, Anderson, & Wahlstrom, 2004; Leithwood & Jantzi, 2005; Leithwood & Sun, 2009; Leithwood & Louis, 2011; Sun & Leithwood, 2014; Sun & Leithwood, 2017). These studies developed a hybrid model of successful school leadership, and have claimed school leadership is a crucial component to teachers’ job satisfaction and the act of teaching (Leithwood, Louis, Anderson, & Wahlstrom, 2004; Leithwood & Sun, 2009). These studies found that teachers who are not satisfied with their occupation will eventually leave schools where there are ineffective school leaders. Effective school leaders should provide individualized support and intellectual trainings to teachers and engaging the school community in the achievement of shared visions and goals. The finding also provides a compelling sense of purpose indicating that developing
effective school leaders becomes a vital part of the process in recruiting and retaining the high-qualified teachers, especially in rural areas. Effective school leaders can promote and sustain an environment stable enough to attract, maintain, and support teachers’ professional development (Clotfelter, Ladd, Vigdor, & Wheeler, 2006; Sun & Leithwood, 2014).

Indeed, the contribution of effective school leadership is discussed frequently when it is need most; However, there are not many documents instancing of teachers’ perceptions of how they view their school leadership, and how much the support of school leaders may directly or indirectly influence their teachers’ perceptions of school climate, and job satisfactions. While other factors outside the school may also contribute or influence teachers’ choices, leadership is always the catalyst. There has been a need to better understand how school leadership may influence, directly or indirectly, teachers’ perceptions towards job, inclusive of job satisfaction, efficacy, and morale (Olsen, 2008).

The data from the OECD, Teaching and Learning International Survey or TALIS, may provide a few lessons. TALIS tells us the job satisfactions is higher when teachers receive support from school leaders for their professional growth. Further, qualitative methods may help us further understand how leaders influence teacher job satisfaction in rural schools with high levels of teacher shortages.

Since the world is becoming smaller with the trend of globalization, there is also a need for more comparative research to explore the similarities and differences between Western and Eastern rural educator leaders. This proposed dissertation proposal will contribute to building the bridge for understanding teachers’ different perceptions of leadership support between the United States and China. Yet only a few case studies
(Huysman, 2008; Monk, 2007; Murphy & Angelski, 1997; & NCES, 2007, 2009) have examined the rural teacher perceptions of job satisfaction, and retention among leadership support, with a focus on the factors of teachers’ voices that might drive to understand better about rural teachers’ preferences and choices in the U.S., with the growing number of schools focusing on Chinese language, and with the growing interest in Western educational approaches to schools in China.

While the strengths of the school leadership literature have outlined a series of recommendations for reorganizing and sharing leadership as an informal and formal function within a school to improve effectiveness (Spillane, 2006, 2015). Assumed in these recommendations is that the directional effect of distributed leadership is not a singular but a continual event (Gronn, 2009, 2015). However, drawing from the previous qualitative interview studies (Camburn, Rowan, & Taylor, 2003; Elmore, 2000; Gronn, 2000, 2002; Harris, 2005; Higgins, Ishimaru, Holcombe, & Fowler, 2012), we are still do not sure how much influence of leadership on teacher job satisfaction perceived by teachers with various practices in improving teachers’ working environment, and retention. Thus, this study will investigate and analyze how school leaders influence working condition, job satisfaction from the perspectives of teachers. The researcher will project a framework of school operations from a comparative view that presents the school leadership as an evolving but relational set of interactions among different entities (Sun & Leithwood, 2015). However, to date, research that focusing how perceived leadership influence teachers’ job satisfaction in rural areas has still been limited.
2.4 TEACHER LEADERSHIP

A number of complexities within the school setting, as well as the changing climate of school regulations, has complicated the conceptualization of teacher leadership within a school setting (Conley, 2003; Diamond & Spillane, 2016; Hallinger, 2011a; Harris, 2005; Neumerski, 2012; Spring, 2011). Since the mid-1990s, distributed leadership (DL) has been the conceptual approach to develop leadership knowledge, skills, and dispositions in hopes of improving school outcomes. It is argued that with a series of educational reforms and mandates implemented in schools, transforming a school is becoming more and more complex. There is a need to create an environment where leadership can thrive as a product of interactions that allow everyone in school to take leadership roles and responsibilities, namely distributed leadership (For example, Bennet, Wise, Woods, Harvey, 2003; Camburn, Rowan, & Taylor, 2003; Elmore, 2000; Gronn, 2000; Harris, 2005; Ishimaru, 2012; Leeson, Campbell-Barr, & Ho, 2012; Ogawa & Bossert, 1995; Spillane, 2005, 2006; Spillane, Halverson, & Diamond, 2001).

Distributive leadership has been evolved these years. Spillane (2005) defines leadership as an interactive process among leaders, followers, and situations, and Gronn (2000) conceptualizes it as a concerted action of individuals who gather their expertise together. Though these two models were questioned by an approach which empowers others from a powerful leader on the top, and a hybrid concept of distributed leadership has been developed with emphases on collaboration and sharing (Leithwood et al., 2007; Spillane, Camburn, & Pareja, 2007; Timperley, 2005).

Teachers have seen their roles change from instructional delivery personnel to participants in school leadership teams at the grade and school level that are considered
distributed later in the twentieth century and has undergone a revision that affects school performance (Diamond & Spillane, 2016; Fullan, 2009). From a leadership perspective, the teacher roles are still open for discussion (Spillane et al., 2008). Distributed leadership changes the function of a leadership position within a school (Gronn, 2000). Diamond and Spillane (2016) argued that distributed leadership is a conceptual framework that facilitates an understanding of how practices are accomplished within a school setting (p. 147). Within this distributed construct, three operationalized forms have emerged in a school setting: a collaborative, a collective, and a coordinated process working together to accomplish the school's mission (Spillane, Diamond, & Jita, 2003). Moreover, Spillane, Parise, and Sherer (2010) demonstrated that principal-teacher interaction and participation could transform a school organizational structure using a collaborative, collective, and coordinated process, thus defining the school as a distinct entity, with systematizing routines, that maintains direction and transparency to link classroom practices. The above applications of distributed leadership were located in the Western-based context. The lack of empirical evidence on the effectiveness of distributed leadership in promoting instructional improvement and increasing student achievement in Chinese rural context is considered as a weakness to apply to this study. Since distributed leadership was created by the U.S. based research, concerns to apply distributed leadership practices to Chinese rural school context was obvious. In Chinese rural schools, what matters for school improvement is not that leadership is distributed, but how the power is allocated among interacting components: principals, teachers, and the community in the rural area. Thus, the suitability of distributed leadership in rural
Chinese schools remains arguable. I didn’t use the distributed leadership theory to guide the comparison of rural schools between the United States and China.

2.5 POLICY, TEACHING PEDAGOGY AND CURRICULUM DEVELOPMENT IN THE UNITED STATES AND CHINA

China has had a long history of preparing leaders on moral grounds based on Chinese culture. As China has opened its economy over the past four decades, economic and academic development and living standards have greatly improved. The development in China gradually shows progress on the social coordination and strengthening the nation’s powerhouse on economy and academy (Allison, 2017). The notion of leadership in China has been influenced by Confucianism and collectivism, where the leader has shifted from “someone who does something to someone who is something” (Shouse & Lin, 2010, p. 24). Researchers have discussed different leadership, curriculum, and education pedagogy in China (Hallinger, Walker, & Bajunid, 2005; Hofstede, 1980). However, research studies on how policy plays on social, political, moral, cultural context in China are still limited. In Western education, the concept of leadership pervades the society. The idea of leadership can be seen in the school setting. The concept of leadership is growing in the U.S. as “departments of educational administration” has changed to “departments of educational leadership” (Shouse & Lin, 2010). In the U.S., similar to the other countries, high needs schools experience exponentially more teacher vacancies than other schools. The schools in the top quartile of teacher vacancies or with 30% of the students who are below the poverty index are often found in rural areas (NCLB, 2001). Lo (1996) suggested that the West has been predominantly concerned with theories and abstract concepts to understand the nature of
morality and equity. For example, a school policy of the choice, deregulation, evaluation, and managerialism in Scandinavia was implemented on striving for equity through the enlightenment heritage for a social welfare system (Johannesson, Lindblad, & Simola, 2002). Although Chinese philosophers also spent time on the meaning of moral values, they had been more interested in the practical aspects of morality and spent more time on developing ways of doing good. The concern for practical forms of morality was expressed very early in the history of China as ethical humanism. Chan (1963) showed how Chinese philosophy was dominated by ethical humanism and placed great emphasis on people and their activities in the world from the earliest recorded times. Since the Chou dynasty, he noted, the spiritual-like force of ethical humanism was replaced by ‘the Mandate of Heaven’, a moral law whose constant factor was virtue. In this light, man’s destiny is linked not to the existence of a soul nor to the whim of a spiritual force as in the Greek tradition but to his own good words and deeds. Interestingly, besides the studies of the wisdom tradition, there is a few literatures mentioning in a broader philosophy that explicitly explained the relationship between the teachers’ perceived leadership and teachers’ satisfaction of the job, only in the book John Dewey’s two years teaching in China (1921) explicitly noting the teachers perceived leadership influence differently in China, and United States. One of the issues plaguing the rural schools in the U.S. is teacher retention which is also afflicting the rural schools in China. In China, the teachers do not want to teach in rural schools (Guo, 2013), which is parallel to the United States and specifically the most teacher vacancies are in rural areas (Calkins, Guenther, Belfiore, & Lash, 2018). It is imperative to analyze the teachers’ perceptions towards the leaders and how the leadership support influence their job satisfaction. Teachers in
Western or Eastern countries can embrace the global citizenship and educate students to become future leaders in this global world. By combining how Western and Eastern perceived school leadership, school leaders’ roles can be manifested and facilitated in improving rural education in the Western and Eastern countries. The strengths of the empirical literature explained the historical, economic, and cultural perspectives of teachers’ perceptions between the United States and China. However, few literatures illustrate the social cognitive and psychological factors on teachers’ perceptions on their job. There is a need alluding the organizational structure (school), and the ecological system structure (society) are perceived by individuals (teachers). Next, I will propose a conceptual framework that focuses on the experiences of teachers within different social-ecological layers where teachers interact with peers, and school members. My conceptual framework will look closely into the social system and factors that affect teachers’ experiences. In other words, the experience of teachers can be explored through the interactions with students and colleagues in the school settings. The ecological system model is a relevant tool that examines how multiple layers of environment and the interactions that surround teachers that influence the community of learners’ collaboration and communication with each other.

2.6 CONCEPTUAL FRAMEWORK

The conceptual framework is adapted from Bronfenbrenner’s (1979) Ecological System Theory (EST) and Bandura’s (1997) Social Cognitive Theory. EST can be applied to teachers’ experience through examining the multiple layers of a society and the interactions that surround an individual (teacher). The inner layer is microsystem that showing teacher as an individual. Bandura’s social cognitive theory will be applied to
teachers’ practice to guide to look on teachers’ social and behavioral experiences and their perceived challenges. Bronfenbrenner’s EST will be applied to understand the interactions and relations between teachers and various factors within different layers of environment, including the school principals and peers, and workplace and school disciplinary climate, and relations among the community and participation among stakeholders, and so forth. My conceptual framework is presented as follows.

Figure 2.1 Conceptual Framework

This conceptual framework will be used to guide my method and data analysis. I will examine the relationship among various factors that affects teachers job satisfaction in the methodological part. Bandura’s (1997) social cognitive theory and Bronfenbrenner’s (1979) Ecological System Theory (EST) are the motivational theories that guided the study. The conceptual framework and the theories are related to teachers’ perceptions towards leadership support and career choices, which emphasize reciprocal
determinism or the interplay relationship among the person, behavior, and the environment.

2.6.1 ECOLOGICAL SYSTEM THEORY

Bronfenbrenner’s (1979) Ecological System Theory (EST) will be used to approach how different surrounding environmental factors can influence the perceptions of an individual (teacher). The ecological system framework was introduced by sociologist associated with the Chicago school development after the World War I and was further developed to understand the relevance of psychological and social aspects of the person in human development. Bronfenbrenner’s EST illustrates the complexity of the individual’s socio-cultural world that affects one’s perceptions and development as well as interactive relations among personal and environmental factors, which bridges the gap between social cognitive theories that focus on organizational settings, such as schools (Bronfenbrenner & Morris, 1998; Cross & Hong, 2012). It is important to note that the focus of the study is not only on schools, but also teachers. Bronfenbrenner's EST is appropriate for the study because it explains the complexity of the personal and environmental factors that affects one's perceptions towards the environment and social and behavioral cognition. Bronfenbrenner's EST model guided to understand the interactions and relations between teachers and the various factors within the different layers of environments. Thus, EST is helpful to investigate teachers' experiences in this comparative study.

Microsystem

The microsystem in the EST is the most inner layer of the environments in which the individual lives; within the microsystem, the individual directly and immediately
interacts with social agents such as the individual’s parents, peers, and school setting (Santrock, 2002). Teachers’ perceived leadership on job satisfaction can be affected and modified by the teachers’ cognitive and social environment (microsystem) as well as interactions with environmental factors, such as principals, peers, and community members in the mesosystem.

**Mesosystem**

The mesosystem is the layer that produces the interactions and relations among the individual’s microsystems (i.e., teachers). Bronfenbrenner (1979) defines it as “the interrelations among two or more settings in which the developing person actively participates” (p. 25). It is important to see in what ways the microsystems interact with each other in the mesosystem. If they pursue similar goals and support each other, it will influence the individual to feel secure enough to be able to actively develop oneself. On the other hand, if the goals are dissimilar or do not support each other, the microsystems can conflict with each other in terms of the ways of thinking and behaving (Härkönen, 2007). The experience of teachers is a part of the mesosystem, wherein teachers’ interactions with the school setting will be systematically examined. In other words, the individual may recognize this as conflicting forces and feel under pressure. In mesosystem, teachers interacted among the systems within the environment as well as their experiences with teaching and perceptions on the principals and peers.

**Exosystem**

The exosystem is a large social system, in which the individual is not directly involved in (Paquette & Ryan, 2001), but can still influence the individual in their immediate context (Santrock, 2002). Namely, the exosystem and its aspects can affect a
certain environment in which the individual experiences events and develops. In this study, educational policies such as the evaluation system and college entrance system can be an example of an exosystem, thus affecting the individual in their immediate context.

**Macrosystem**

The macrosystem refers to “the overall societal culture in which individuals live” (Christensen, 2016), which overarches the pattern of the microsystem, mesosystem, and exosystem. The macrosystem refers not only to the legal, political, and economic contexts but also to the values of society, patterns of social interchange, and customs of a particular culture and society (Cross & Hong, 2012). With the ecological concepts of educational society and teachers’ thematic framework, macrosystem traced the historical structure in the society, researched and studied the basis construction and the major features of functions of school in the society of cultivating international citizens, and optimizing the learning environment, and strengthening the nation and the whole society. Each society can have similarities, but ultimately have a different macrosystem. In the United States, Every Student Success Act (ESSA) and the decentralized governing system encourage teachers to pursue safe, equal, and organized school environment and social mobility. In China, the value of cultural foundation with Confucian ideas and practices in the centralized governing system encourage teachers to prefer working in a school area where the local community emphasizing the importance of family, and respect (Wong, 2008). Although the individuals in a society may assume their experiences as natural, it may be challenging to understand the experiences without considering the macro level of influences that come from their own culture, customs, and values (Cross & Hong, 2012).
In summary, Bronfenbrenner’s EST (1979) examines the multiple layers of a social environment and the interactions that surround an individual. In Bronfenbrenner’s analysis of the ecological development of an individual (child), the individual is influenced by diverse environments such as the parents, peers, teachers, schools, educational system, socio-cultural and economic settings. From the interactions within these environmental factors, the individual creates one’s own social-cognition, perceptions, and developments, where teachers are viewed as a community of learners and agents of change (Sheridan et al., 2013).

2.6.2 SOCIAL COGNITIVE THEORY

Bandura’s (2006) social cognitive theory is one of the major modern theories of motivation, which has contributed broad ideas about social cognition and for its theorizing regarding teachers’ beliefs and self-efficacy (Lent & Brown, 2006). Research (Caprara et al., 2003; Ryan &Deci, 2000; Tschannen-Moran et al., 1998; Wookfolk & Hoy, 1990) has showed teachers' beliefs are highly relevant to teachers' job satisfaction. Teacher' job satisfaction is related to teachers’ career choices, putting forth greater effort and task persistence even in the face of failure, increased use of adaptive strategies, and more positive and less negative emotions.

Within social cognitive theory, self-efficacy refers to the beliefs about teaching capacity to execute behaviors (Bandura, 1997). Teachers’ self-efficacy refers to their beliefs about their capability to teach, develop skills and commitment to the occupation (Schunk & Pajares, 2005). Self-efficacy is distinct from outcome expectations (e.g., belief that a given behavior will lead to a certain outcome) and self-concept (e.g., cognitive evaluation of ability; Schunk & Pajares, 2005). Previous studies examined
teacher satisfaction in the context of social cognitive theory (Caprara et al., 2006; Duffy & Lent, 2009; Lent & Brown, 2006; Lent et al., 2011). Bandura’s social cognitive theory provided a theoretical foundation for these studies and guided the linear, descriptive, and exploratory methods of analysis.

In the quantitative analysis, I assume the construct of self-efficacy regarding its relations with teachers’ job satisfaction. Bandura’s (1997) social cognitive theory works to examine relationship among factors between the latent level and observable level that may explain or predict teachers’ job satisfaction (Brief & Weiss, 2002; Lent & Brown, 2006; Vroom, 1964; Van Houtte, 2006). In this study, Bandura’s (1997) social cognitive theory will be helpful to guide the development of SEM and integrative models based on the assumption that teachers’ job satisfaction was probably determined by the interplay among multiple factors (perceptions of leadership support, discipline, collaborative relations, participation, professional development, and autonomy).

Chapter three presents my methodology in which I built upon prior literature on rural school leadership studies (Bauch, 2001; Brown & Schafft, 2011; Hallinger, 2016; Schaffet & Jackson, 2010). In the quantitative study, I utilized TALIS 2018 data and introduced two subscales that each assess three dimensions of teachers’ job satisfaction that extended prior school leadership research. The dataset included 2976 teachers from America and 3016 teachers from China. To further investigate how school leadership practice influences the teachers’ perceptions of job satisfaction of subfactors of working environment, safety, and relationships which reinforces learning, I discuss methodology in chapter three.
CHAPTER 3
METHODOLOGY

3.1 RESEARCH DESIGN: A MIXED METHODOLOGY APPROACH

This chapter outlines the mixed methodology used in the study and is organized as following sections: the mixed methods research design, data collection, hypothesis, research questions, measurements, and data analysis. To begin, I collected both quantitative and qualitative data in the study to answer my research questions. I used the TALIS 2018 survey and use follow up interviews with 24 teachers to deeper explain the results of the survey. I view this research in two phases. For the first quantitative phase, my research question is “How does leadership affect teacher job satisfaction from the perspectives of teachers from China, and the United States in the 2018 TALIS?” In this study, I collected quantitative survey data and then followed up with qualitative interview data to help explain the initial quantitative results. A mixed methodology approach was appropriate for this study because the mixed methods research is a procedure for collecting, analyzing both quantitative and qualitative data in a series of studies to understand a research problem (Creswell & Plano Clark, 2011). Mixed methods research is good to use in this study because I sought to build on the strengths of both quantitative data from TALIS 2018 survey and the qualitative data of teacher interviews, which had a powerful mix of offering different perspective on the study (Miles & Huberman, 1994)
and provided a complex picture of the situation of the perceived leadership on teachers from the United States, and China.

3.1.1 QUANTITATIVE APPROACH

I used the 2018 Teaching and Learning Survey (TALIS) data set and conducted a confirmatory factor analysis (CFA) for the quantitative study. CFA produced coefficients that demonstrated the extent of the relationship among the latent constructs. Following CFA analysis, a multivariate analysis of variance was conducted to determine if perception of these constructs differed among teachers’ satisfaction with the current schoolwork environment, satisfaction with the profession, and participation among stakeholders.

TALIS (Teaching and Learning Survey) 2018 is a large-scale teacher survey to collect views of teachers and administrators from different countries on schools, programs, and practices to provide international comparative data. TALIS discussed the overall teaching processes as factors affecting teaching processes at the classroom and school level. The survey was administered to teachers and administrators working at the ISCED 2 education level (starting from age 11-12 and continuing for three years) in the participating countries. This age group corresponds to the last stage of mandatory education in many countries. Forty-eight countries participated in TALIS 2018, and the views of teachers and administrators about topics such as professional development, teaching-learning processes and the teaching profession were identified. Thus, country profiles were identified according to the teacher and administrator views about the education systems (OECD, 2019).
Research Hypotheses and Theoretical Perspectives

Drawing on the above literature, I assumed that teachers’ perceived leadership support would contribute significantly to teachers’ job satisfaction, specially to autonomy, environment, and profession. Furthermore, I expect that country’s differences would impact the perceived school leadership support, which in turn, exerts an influence on teachers’ job satisfaction.

Therefore, I posited three hypotheses in this study:

1. Better teacher-student relations and higher participation among stakeholders and teachers contribute to teachers’ positive perceptions of leadership support.

2. Teachers from the U.S., and China have different perceptions of their perceived school leadership support and job satisfactions.

3. Teachers’ perceived school leadership support and their country simultaneously contribute to teachers’ job satisfactions.

The theory for the above hypotheses is based upon Bandura’s social-cognitive theory (Bandura, 2006) because the theory contributing reciprocal determinism or the choice among the person, behavior, and the environment, specifically, that teachers’ perceptions impact their beliefs of job satisfaction. Research has shown that teachers’ perceptions about the work environment and relations with school leaders have on various domains of functioning teaching behavior and social cognition (Bandura, 2002). Thus, social cognition is the theory guiding to study teachers’ job satisfaction of work. It is likely that teachers’ job satisfaction, in turn, contributes to teachers’ perceptions of work environment, autonomy, and profession.
Data Collection

Participants. The data source for this study was from the Teaching and Learning International Survey (TALIS), which was conducted in 2018 by the Organization for Economic Cooperation and Development (OECD) among 49 participating countries and economies. TALIS is a cross-national study to address the teaching and administrative environments within lower secondary schools (i.e., school that serve students classified as grade seven through grand nine). TALIS is also a cross-sectional study that provides policy-relevant data concerning teachers and principals. For this study, I used the sample of participants from the U.S. and China. All participants were teachers from lower secondary level schools. The records of 1900 American teachers and 3163 Chinese teachers were selected for this study. There were 1247 female American teachers, and 653 male teachers from the United States, and 2353 female teachers and 800 male teachers from China. Among the participants, 65.6% of them are females (n=3315) and 34.4% are male teachers(n=1738).

Instrumentation. The first scale measured teachers’ perceived school leadership support with 13 items. It is a 4-point scale with anchors of “Strongly disagree” =1, “Disagree” =2, “Agree” =3 and “Strongly agree”=4. The scale measured three dimensions of perceived school leadership support including teachers perceived disciplinary climate (e.g., “There is much disruptive noise in this classroom”), teacher-student relations (e.g., “Teachers and students usually get on well with each other”), and participation among stakeholders and teachers (e.g., “This school provides staff with opportunities to actively participate in school decisions”). A sum score ranged from 1 to 52 with a higher score indicating a higher perception of school climate.
The second scale measured teachers’ perceived school leadership support with 13 items. It is also a 4-point scale with anchors of “Strongly disagree” = 1, “Disagree” = 2, “Agree” = 3 and “Strongly agree” = 4. while adding county (USA = “0”, China = “1”) in the group as covariate variables. This step is to investigate how country impacts the teachers’ job satisfactions on their perceived school leadership support.

The third scale measured teachers’ job satisfaction with 13 items, teachers’ perceived school climate with 13 items in two countries. It is a 4-point scale with anchors of “Strongly disagree” = 1, “Disagree” = 2, “Agree” = 3 and “Strongly agree” = 4. The scale measures three dimensions regarding teachers’ job satisfaction including job satisfaction with work environment (e.g., “I enjoy working at this school”), Job satisfaction with profession (e.g., “The advantages of being a teacher clearly outweigh the disadvantages”), and job satisfaction with target class autonomy (e.g., “Determining course content”). A sum score ranged from 1 to 52 with a higher score indicating a higher level of job satisfaction. See Table 3.1.

Table 3.1 Items and Description of Instruments

<table>
<thead>
<tr>
<th>Item</th>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TT3G40A</td>
<td>1</td>
<td>Determining course content</td>
</tr>
<tr>
<td>TT3G40B</td>
<td>2</td>
<td>Selecting teaching method</td>
</tr>
<tr>
<td>TT3G40C</td>
<td>3</td>
<td>Assessing students’ learning</td>
</tr>
<tr>
<td>TT3G40D</td>
<td>4</td>
<td>Discipling students</td>
</tr>
<tr>
<td>TT3G40E</td>
<td>5</td>
<td>Determining homework to be assigned</td>
</tr>
<tr>
<td>Teachers’ perceived disciplinary climate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TT3G41A</td>
<td>6</td>
<td>Waiting a long time for students to quieten down before class</td>
</tr>
<tr>
<td>TT3G41B*</td>
<td>7</td>
<td>Students take care to create a pleasant learning atmosphere</td>
</tr>
<tr>
<td>TT3G41C</td>
<td>8</td>
<td>Students interrupting the lesson</td>
</tr>
<tr>
<td>TT3G41D</td>
<td>9</td>
<td>There is much disruptive noise in this classroom</td>
</tr>
<tr>
<td>Participation among stakeholders and teachers</td>
<td>TT3G48A</td>
<td>10</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>---------</td>
<td>----</td>
</tr>
<tr>
<td></td>
<td>TT3G48B</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>TT3G48C</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>TT3G48D</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>TT3G48E</td>
<td>14</td>
</tr>
<tr>
<td>Teacher-student relations</td>
<td>TT3G49A</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>TT3G49B</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>TT3G49C</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>TT3G49D</td>
<td>18</td>
</tr>
<tr>
<td>Work environment</td>
<td>TT3G53C</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>TT3G53E</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>TT3G53G</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>TT3G53J</td>
<td>26</td>
</tr>
<tr>
<td>Profession</td>
<td>TT3G53A</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>TT3G53B</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>TT3G53D</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>TT3G53F</td>
<td>24</td>
</tr>
</tbody>
</table>

*Item was reverse coded. Source: OECD, TALIS 2018.

**Data Analysis**

I conducted all analyses with RStudio software. The default estimation method—Maximum Likelihood (ML) was used to accommodate the data because it is assumed to normality. Confirmatory Factor Analysis (CFA) models were conducted twice to test three-factor model identified in the previous study for each of the scale. We allowed the variable for each factor to freely correlate except for the reference variable for each
factor. To set the scale for the CFA, the loading value of the reference variable was fixed to 1.0 so that other parameters can be freely estimated.

Second, I used Structural Equation Modeling (SEM) to examined whether teachers’ perceptions of the school climate (as measured by School Climate Survey) were associated with their job satisfaction (as measured by Job Satisfaction Survey). SEM is a method used for representing the causal relations in multivariate data (Kline, 2005). It consists of two major parts. The measurement model represents a set of observable variables as indicators of a smaller set of latent variables. The structure model describes the causal relationship between the latent variables (McDonald & Ho, 2002).

Both CFA and SEM models were evaluated using the following indices: chi-square statistic, comparative fit index (CFI), root mean squared error of approximation (RMSEA), and standardized root mean square residual (SRMR). The following cut-off values were suggested to show good model fit CFI ≥ .90, SRMR ≤ .08 and RMSEA ≤ 0.08 (Hu & Bentler, 1999). Besides global model fit, local fit indices such as residual values and interpretability of parameter estimates were examined. The model fit indices would suggest the relationship among six factors: perceived leadership support, autonomy, participation, relations, work environment, and profession. These six factors are only playing as indicators for teachers’ job satisfaction. Though TALIS and its findings about all schools across nations between the United States and China gave a generalization about the teachers’ perceptions on their job satisfaction, but it didn’t particularly examine the challenges of teachers in rural communities. Thus, a qualitative study would be helpful to provide further details and to expand the quantitative analysis with their implications on actual practice of how teachers perceived these indicators that
effect their job satisfaction. The qualitative study can give a deeper understanding about teachers’ perceptions in rural communities where major challenges in teacher shortages and retentions are existing. Thus next, a qualitative approach will be discussed to deepen the study of how perceived leadership influences teachers’ job satisfaction.

3.1.2 QUALITATIVE APPROACH

Data Sources, Sampling and Collection

I employed qualitative methods to explore in what ways leadership support affect teacher job satisfactions in the perspective of teachers from China and the United States, and what differences and similarities of leadership support influence teachers’ job satisfactions between the teachers in China, and the United States. I utilized a purposive sampling strategy (Patton, 2015) to identify participants meet the following criteria: (a) public elementary or middle schools, (b) rural schools have a poverty index below the state or provincial median, (c) teachers who had been serving at the rural school for at least 1 year and was determined to continue to teach in the next school year. As a low country school improvement project team member, I interviewed 12 teachers from the low countries in South Carolina and I interviewed 12 teachers from rural area in Heilongjiang Province, Northeastern China virtually. All names used in the study were pseudonyms. All study procedures were approved by the University Institutional Review Board and each participant completed a written informed consent prior to study entry. Initial data collection for this study took place over two years in various sites, including schools, and communities in South Carolina. I collected multiple sources of data, including participants’ observations, photos, and on-site, virtual interviews, and document collection. I conducted the first part study with the South Carolina Low
Country School Improvement Project team. We conducted semi-structure interviews (Patton, 2015) with twelve teachers in South Carolina from May-June 2019. Each interview was audio-recorded during a 50–60-minute session. All twelve interviews were conducted in person. The question protocol was reviewed and edited among two faculty peer members. The interview protocol included questions about participants’ past experiences in education, questions about their teaching practices, and open questions about their views of leadership support in the rural schools, their future needs as rural teachers, and potential changes in their career. The interview questions are relevant to my research questions. I interviewed twelve teachers in China from May-July 2021, with semi-structured interview questions based on the teacher interview protocols adapted from the low-country school improvement team. All Chinese teachers’ interviews conducted virtually due to the COVID-19 pandemic. As there exists little empirical work that provides strong knowledge on rural teachers’ perceptions of their leadership support to the job satisfactions and retention comparing the teachers between the United States and China, my goal was to get deeper qualitative analysis after quantitively revealing general meaning structure of teachers’ perceptions of leadership support that influences their job satisfactions and retention in the rural schools.

Data Analysis

I used NVivo 11 to develop codes (Talyor & Bogdan, 1998) for analysis. In the process of coding, I used descriptive phenomenology (Colaizzi, 1978; Giorgi, 2009; Moustakas, 1994) to identify themes, because this phenomenological perspective focuses on capturing and describing the “essence” or “essential structure” (Giorgi, 1985) underlying a teacher’s perception of leadership. The main purpose of phenomenology
was to discover and described patterns or structures of social and psychological phenomena as lived experiences of people (Giorgi, 1985; Greene, 1997; Husserl, 1970). Therefore, I used phenomenological perspectives as the first step of coding procedure so I can track back to the branch of philosophy dealing with the phenomenon of human conceptions (Moustakas, 1994; Von Eckartsberg, 1986), and generated the emergent pattern on perceived leadership study influence teachers’ values, perceptions in different cultural context. Phenomenological inquiry was appropriate for the research focus, because there is scarce prior knowledge on the comparison of how teachers perceived their school leadership support among the relationship of school climate, and teachers’ job satisfactions between the United States, and China, as teachers from those two countries participated in and experienced different social phenomenon. A phenomenological approach allows the researcher to unravel the “essence” of human perception of a given phenomenon for those who experience it through a reflective analysis (Patton, 1990). By collecting and analyzing interview data featuring teachers’ phenomenological descriptions of their experiences and how their perceptions were formed or transformed as they navigated the working experiences through their principal’s support, I was able to yield deep insights into what means to be effective leadership support for teachers in high-needs schools. Second, I conducted another round of coding by comparing initial round one to reveal the most emergent patterns (Taylor & Bogdan, 1998) on the influence of perceived leadership on teachers’ job satisfactions that were imbedded specifically within the context of rural schools in the U.S., and China. Coded entries were then to be consolidated into themes to determine the most salient findings related to the two qualitative research questions.
3.1.3 INTEGRATION OF THE STUDY METHODS

Mixed methods approaches were used to answer my quantitative and qualitative research questions in the same study. When addressing how school leaders’ support influence teachers’ perceptions on their job satisfaction, “mixed methods inquiry combining the collecting and analyzing of both quantitative and qualitative data within on study are applied to address the issues of teachers” (Schutz et al., 2016). Integration occurs when I intentionally combine quantitative and qualitative approaches in a study that combines a more comprehensive understanding of the topic (Fetters & Molina-Azorin, 2017). Specifically, the following research questions are addressed (1) How does the perceived school leadership support affect teachers’ job satisfactions in China and in the United States? (2) What are the differences and commonalities regarding the perceived school leadership between China and the United States?

Though the quantitative study provided a general finding on how leadership support influence teachers’ job satisfactions, I explored more details on the themes of leadership support between the two countries’ school leaders. Therefore, the qualitative study was conducted to help expand on some of the findings presented in the quantitative study. The qualitative study has a common goal with the quantitative study and worked as a convergent design (Creswell & Clark, 2017). In the convergent design, the data for the quantitative and qualitative strands are collected, and analyzed independently, and then the data from both strands are integrated during interpretation to identify possible sources of convergence (Creswell & Clark, 2017). The implementation of neither strand is contingent on the data analysis of the other strand (McCruden et al., 2019). The
integrating of two strands is to generate interpretations that extend the width and range of
the depth from integrated results from the two strands (Creswell & Clark, 2017).

![Diagram of Mixed Methods Convergent Research Designs](image)

Figure 3.1 Mixed Methods Convergent Research Designs. Adapted from Creswell and Clark (2017)

Integrating the two strands enhanced the study by enabling the me to evaluate
overlapping yet different facets between the American teachers and Chinese teachers.

The convergent mixed methods study design to investigate teachers’ perceived school leadership support influence their job satisfactions. In the qualitative strand, I conducted teachers interviews to evaluate teachers’ perceptions on the leadership support, empowering teachers, professional development, and responsibilities on their occupation. Teachers explicitly talked about what type of school administrative support is necessary to improve teachers’ job satisfactions. The qualitative data was then coded and transformed into themes on the preparation, leadership support, responsibility and autonomy, and professional development.

3.2 ETHICAL CONSIDERATIONS

In accordance with institutional review requirement, I have taken extreme care to protect the identities of our participants. In their positions as rural teachers in low country, they are inherently professionally vulnerable to identity disclosure and negative
professional consequences resulting from their participation. Each of the participants shared stories that would possibly identify them, other stakeholders, or their school communities. The participants were vulnerable, and honest when providing insights about their work. I have redacted sensitive details from the data set, and withheld extensive details about the participants, their schools, or surrounding communities. I assigned pseudonyms of those teachers.

3.3 POSITIONAITY

I acknowledge the idea, “how we see is shaped by our experiences” (Orellana, 2016, p.33) because our prior experience always impacts the ways that we perceive, hear, interact with, and write about educators. In this section, I explore and unpack my own identities, and how my cultural, linguistic, mobile and study experiences have impacted the ways I have interacted with perception and how I have studied the participant school leaders and teachers. This comparative study of the influence of perceived leadership on teacher job satisfaction between the American teachers and Chinese teachers was inspired by my own experience on multiple school field trips crossing geographic locations (from urban to rural, and from city to low countries)and cultural, and ethnic communities (such as, Black, White, Asian, LatinX, etc.) when I did the rural school improvement project with my professors from College of Education of the University of South Carolina.

I am a Chinese international student who has attended secondary schools in Harbin, China and universities in Shanghai, China, and multiple states in the United States, including New York, Wisconsin, and South Carolina. I worked as a secondary school teacher in China. During my years in the U.S., I kept a close connection with my family and my previous teacher colleagues in China through regular exchanges of emails,
goods, and by sharing stories and pictures through digital transnational contacts. It is natural to me to pay close attention to social, cultural, and political issues in both countries’ educational systems and beyond by reading and watching social media in English and Chinese. While my international network and multilingual knowledge were considered assets and resources at the higher education level, there were similarities and differences between the American teachers and Chinese teachers perceiving the school leadership support. For example, I interviewed and heard complaints in high school where an international teacher from Jamaica felt pressured about the support of school leader focus more on her limited understanding of American culture and language instead of recognizing her flexible teaching across languages and cultures. These experiences sparked my interest in wanting to further understand how teachers, whose lives encompass United States and China, perceive school leadership, and how leadership support influences on teachers’ job satisfaction.

Interviewing the linguistically and culturally diverse teachers through research and teaching opened my eyes to the fact that many school leaders should both better train and support teachers with culturally diverse practices. However, leadership support across intercultural and transnational contexts is too often invisible. For example, while interviewing an assistant principal in South Carolina, they said their math teachers from China had never visited, nor engaged in writing where they presented their sense of belonging in Chinese. The assistant principal was not sure how the teachers perceived the leadership support. While closely interacting with some Chinese teachers in America, I learned that the transnational, and cultural engagements are essential for mutual understanding among the school leaders and teachers. These experiences solidified my
ambition to further explore how teachers’ perceived leadership support transnational, and multilingual teachers by listening to and honoring their voices.

Processing leadership knowledge and nuanced understandings of linguistic, cultural, and social contexts in school leadership of both China and the U.S. has been a privilege as I have carried out this cross-national qualitative research involving more than one language. Using my bilingual competencies, I was able to ask questions more accurately to better understand participants’ responses and interactions, thereby building close connections with participants by sharing the joys and struggles of being bilinguals (Ojeda et al., 2011).

I acknowledge, however, that “being born into a group, ‘Chinese native,’ or just being a member does not necessarily afford the perspective necessary for studying the phenomenon” (Merriam & Tisdell, 2016, p.146). Being a bilingual and a bicultural researcher does not necessarily mean that I automatically understand or associate with all language and literacy experiences that the participant teachers shared. It is important for me to reflect upon what I saw and heard from participants in order to gain an in-depth understanding of their perceptions of the school leader, and the job satisfaction. In addition, I tried to be attentive to how my “own reactions and sensitivities differ from some teachers” (Emerson et al., 2001, p.26) in my study, and I documented my own biases, experiences, and perspectives in my reflective timeline journal. Keeping a journal was a great way for me to think about and unpack my own assumptions and look beyond what I observed.
3.4 REFLEXIVITY

Social positionality and previous experiences, whether intended or not, impact qualitative approaches, views, and interact with participants. It is important that I, as a researcher, engage in “a deeper kind of reflectivity about my social positions, as well as about the values, beliefs, assumptions, inclination, and political learnings (Orellana, 2016, p. 34). Particularly since this research involves teachers and school leaders internationally, it is important to be attentive to my own positionality and power as an educational researcher. As Knupfer (1996) suggested, I believe educational researchers should challenge their professional-centric assumptions around school leaders’ responsibilities and to support novice teachers through self-reflectivity (Knupfer, 1996, p. 149).

Given the importance of reflexivity, I tried to maintain reflexivity by documenting my own biases, experiences, and perspective in my reflective journal during the days of data collection process while conducting this dissertation research. Examining and documenting a researcher’s journey is an essential part of conducting interviews because “the unfamiliar aspects of a new virtual site can become familiar and taken for granted. Initial and curiosities can be forgotten” (Dyson & Genishi, 2005, p.39). My reflective writing played a role as an open space where I recorded my own assumptions, experiences, feelings, and reactions. Moreover, it helped me document how the doctoral learning journal shifted across time and space.
CHAPTER 4

FINDINGS

This chapter is organized according to the order of research questions in the study. The results associated with each research question are presented individually. This chapter is concluded with a summary of the key findings, and these summaries provide the context of the discussions, conclusions, and implementations described in the final chapter.

4.1 DESCRIPTIVE STATISTICS

Descriptive Statistics. Table 4.1 exhibits the mean, standard deviation, skewness, and kurtosis for the 32 items of the 2018 TALIS. All skewness and kurtosis range between -2 to 2, indicating a normal distribution of the dataset. Therefore, I treated these items as continuous variables, even though responses were measured on a 4-point scale.

Table 4.1 Descriptive Statistics

<table>
<thead>
<tr>
<th>Item</th>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT3G40A</td>
<td>1</td>
<td>5053</td>
<td>3.25</td>
<td>0.8</td>
<td>1</td>
<td>4</td>
<td>-1.02</td>
<td>0.74</td>
</tr>
<tr>
<td>TT3G40B</td>
<td>2</td>
<td>5053</td>
<td>3.49</td>
<td>0.6</td>
<td>1</td>
<td>4</td>
<td>-1.05</td>
<td>1.89</td>
</tr>
<tr>
<td>TT3G40C</td>
<td>3</td>
<td>5053</td>
<td>3.4</td>
<td>0.61</td>
<td>1</td>
<td>4</td>
<td>-0.89</td>
<td>1.63</td>
</tr>
<tr>
<td>TT3G40D</td>
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<td>5053</td>
<td>3.32</td>
<td>0.67</td>
<td>1</td>
<td>4</td>
<td>-0.89</td>
<td>1.33</td>
</tr>
<tr>
<td>TT3G40E</td>
<td>5</td>
<td>5053</td>
<td>3.42</td>
<td>0.63</td>
<td>1</td>
<td>4</td>
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<td>1.77</td>
</tr>
<tr>
<td>TT3G41A</td>
<td>6</td>
<td>5053</td>
<td>1.78</td>
<td>0.74</td>
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<td>TT3G41B</td>
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<td>1</td>
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<td>0.62</td>
<td>0.8</td>
</tr>
<tr>
<td>TT3G41C</td>
<td>8</td>
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<td>0.75</td>
<td>1</td>
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<tr>
<td>TT3G41D</td>
<td>9</td>
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<td>1</td>
<td>4</td>
<td>0.76</td>
<td>0.35</td>
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<td>TT3G48A</td>
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<td>4</td>
<td>-0.63</td>
<td>0.62</td>
</tr>
<tr>
<td>TT3G48B</td>
<td>11</td>
<td>5053</td>
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<td>0.67</td>
<td>1</td>
<td>4</td>
<td>-0.46</td>
<td>0.64</td>
</tr>
</tbody>
</table>
4.2 CONFIRMATORY FACTOR ANALYSIS

My first research question is, what are the relationships among discipline, collaborative relations, participation, and perceived leadership support for the rural teachers?

Table 4.2 The Association between the Latent Factors on School Climate Scale

|                | Estimate | Std.Err | P(|z|) | Std.lv | Std.all |
|----------------|----------|---------|-------|--------|---------|
| Discipline ~ Relations | -0.063   | 0.004   | 0.000 | -0.248 | -0.248  |
| Discipline ~ Participation | -0.074   | 0.006   | 0.000 | -0.204 | -0.204  |
As shown in Table 4.2, for School Climate Survey, the three-factor solution yielded an acceptable fit ($\chi^2(62) = 2240.27$, RMSEA = 0.083, 90% CI [0.080 0.086]; CFI = 0.948; SRMR=0.052). Standardized factor loadings values ranged from -0.204 to 0.552. All the latent factors were significantly correlated. Correlation coefficients between factors suggested that Teachers’ Perceived Disciplinary Climate was negatively associated with their perception of Teacher-Student Relations (for correlations between latent variables – use phi or just state the value) $b = -0.063$, $p < .001$) and Participation among Stakeholders and Teachers ($b = -0.074$, $p < .001$), indicating that teachers with higher perception of the schools’ disciplinary climate tend to have lower teacher-student relation as well as the less participation among stakeholders. However, teachers’ perception of Teacher-student Relation is positively associated with their perceptions of participation among stakeholders and teachers ($b = 0.147$, $p < .001$). Figure 4.1 showed the CFA model.

| Relations ~~ Participation | 0.147 | 0.005 | 0.000 | 0.552 | 0.552 |

Figure 4.1 The CFA Model for School Climate
My second research question is, how do the relationships among learning environment, professional development, and autonomy vary between the rural teachers from the United States and China? After adding country as a covariate variable into the Job Satisfaction model, the three-factor solution yielded an acceptable fix ($\chi^2(72) = 2871.8$, RMSEA = 0.088, 90% CI [0.085 0.090]; CFI =0.935, SRMR=0.054). Standardized factor loadings values ranged from 0.011 to 0.321. All the latent factors were significantly correlated. Path coefficients suggested that the U.S. Teachers had higher perceptions on School Environment than Chinese teachers ($b = 0.295, p < .001$) and higher perceptions on profession ($b = 0.160, p < .001$), and autonomy ($b = 0.013, p < .001$), indicating that the U.S. teachers with higher perception of the school environment tend to have higher perceptions on profession as well as higher perceptions on autonomy than Chinese teachers. The results also show significant difference between the two countries in the perceptions of school environment, regarding the profession, and autonomy. American teachers have higher perceptions of environment, profession, and autonomy than Chinese teachers.

Table 4.3 The Association between the Latent Factors on Job Satisfaction Scale in the United States and China

|                      | Estimate | Std.Err | P(>|z|) | Std.lv | Std.all |
|----------------------|----------|---------|--------|--------|---------|
| Environment ~ country| 0.295    | 0.015   | 0.000  | 0.662  | 0.321   |
| Profession ~ country  | 0.160    | 0.016   | 0.000  | 0.321  | 0.155   |
| Autonomy ~ country    | 0.013    | 0.017   | 0.038  | 0.024  | 0.011   |
My third research question is, does the country (the U.S.; China) impact discipline, collaborative relations, stakeholder participation, and teachers’ job satisfaction?

The result shows all the latent factors were significantly correlated. Path coefficients suggested that the U.S. Teachers’ Perceived higher Discipline than the Chinese teachers ($b = 0.333$, $p < .001$) and lower collaborative relations ($b = -0.041$, $p < .001$) and stakeholder participation ($b = -0.245$, $p < .001$) than the Chinese teachers, indicating that U.S. teachers with higher perception of discipline tend to have worse collaborative relation as well as the less participation among stakeholders. Chinese teachers have higher perceptions of collaborative relations and participation but perceived less discipline than American teachers.
Table 4.4 The Association between the Latent Factors on Job Satisfaction Scale in the United States and China

|                              | Estimate | Std.Err | P(>|z|) | Std.lv | Std.all |
|------------------------------|----------|---------|---------|--------|---------|
| Discipline ~ ~ Country       | 0.333    | 0.018   | 0.000   | 0.565  | 0.273   |
| Collaborative Relations ~ ~ Country | -0.041  | 0.013   | 0.000   | -0.096 | -0.046  |
| Participation ~ ~ Country    | -0.245   | 0.018   | 0.000   | -0.396 | -0.192  |

Figure 4.3 The CFA Model for School Climate between the United States and China

4.3 STRUCTURAL EQUATION MODELING (SEM)

My fourth research question is, how do the relationships among discipline, collaborative relations, stakeholder participation, learning environment, professional
development, and autonomy impact teachers’ job satisfaction that varying between the rural teachers from the United States and China?

For analyzing how teachers’ perceptions of the school climate (as measured by School Climate Survey) influenced their job satisfaction (as measured by Job Satisfaction Survey), SEM framework was used to explore how the three latent factors measured by the TALIS School Climate Survey (Teachers’ perceived disciplinary climate, teacher-student relations, and participation among stakeholders and teachers) were associated with three latent factors measured by Teachers’ Job Satisfaction (See Figure 4.4).

Path coefficients suggested that two latent factors (teacher-student relation, and participation among stakeholders) on School Climate Survey are positively associated with all the three latent factors on Job Satisfaction Survey. Teachers with higher perceptions of the disciplinary climate tend to have lower level of job satisfaction with work environment ($b = -0.098$, $p < .001$), profession ($b = -0.091$, $p < .001$), and target class autonomy ($b = -0.133$, $p < .001$). Teachers with higher perceptions of teacher-student relations are more likely to have higher level of job satisfaction with work environment ($b = 0.226$, $p < .001$), profession ($b = 0.205$, $p < .001$), and target class autonomy ($b = 0.336$, $p < .001$). Teachers with higher perceptions of participation among stakeholders and teachers tend to have higher level of job satisfaction with work environment ($b = 0.324$, $p < .001$), profession ($b = 0.213$, $p < .001$), and target class autonomy ($b = 0.091$, $p < .001$) (See Table 4.5).
Table 4.5 The Association between the Latent Factors on School Climate Scale and Job Satisfaction Scale in the United States and China

<p>|                                | Estimate | Std.Err | P(&gt;|z|) | Std.lv | Std.all |
|--------------------------------|----------|---------|---------|--------|---------|
| Discipline ~ country           | 0.333    | 0.018   | 0.000   | 0.564  | 0.273   |
| Relations ~ country            | -0.041   | 0.013   | 0.002   | -0.095 | -0.046  |
| Participation ~ country        | -0.245   | 0.019   | 0.000   | -0.395 | -0.191  |
| Environment ~ country          | 0.419    | 0.015   | 0.000   | 0.976  | 0.473   |
| Environment ~ Discipline       | -0.098   | 0.011   | 0.000   | -0.134 | -0.134  |
| Environment ~ Relations        | 0.226    | 0.015   | 0.000   | 0.227  | 0.227   |
| Environment ~ Participation    | 0.324    | 0.012   | 0.000   | 0.469  | 0.469   |
| Profession ~ country           | 0.251    | 0.016   | 0.000   | 0.519  | 0.251   |
| Profession ~ Discipline        | -0.091   | 0.013   | 0.000   | -0.111 | -0.111  |
| Profession ~ Relations         | 0.205    | 0.018   | 0.000   | 0.182  | 0.182   |</p>
<table>
<thead>
<tr>
<th>Profession ~ Participation</th>
<th>0.213</th>
<th>0.013</th>
<th>0.000</th>
<th>0.274</th>
<th>0.274</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy ~ country</td>
<td>0.118</td>
<td>0.017</td>
<td>0.000</td>
<td>0.222</td>
<td>0.107</td>
</tr>
<tr>
<td>Autonomy ~ Discipline</td>
<td>-0.133</td>
<td>0.014</td>
<td>0.000</td>
<td>-0.147</td>
<td>-0.147</td>
</tr>
<tr>
<td>Autonomy ~ Relations</td>
<td>0.336</td>
<td>0.020</td>
<td>0.000</td>
<td>0.271</td>
<td>0.271</td>
</tr>
<tr>
<td>Autonomy ~ Participation</td>
<td>0.091</td>
<td>0.013</td>
<td>0.000</td>
<td>0.107</td>
<td>0.107</td>
</tr>
</tbody>
</table>

**Figure 4.4 The SEM Model**

Using an to estimate the relationships brings with a few conveniences (Kline, 2016). One is that values of the fit indices (global fit and local fit) statistics are automatically computed in the output. Though some of these results can be calculated by
other techniques but using SEM for larger models is convenience. The model showed an acceptable model with all the indices within the recommended bounds (RMSEA = .073, 90% CI [0.072, 0.075]; CFI = .901; SRMR=0.126) (See Table 4.7).

Table 4.6 The Association between the latent factors on School Climate Scale and Job Satisfaction Scale

<table>
<thead>
<tr>
<th>School Climate Survey</th>
<th>Job Satisfaction Survey</th>
<th>Job Satisfaction Survey</th>
<th>Job Satisfaction with Target Class Autonomy Subscale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disciplinary Climate Subscale</td>
<td>-0.098**</td>
<td>0.013**</td>
<td>0.014**</td>
</tr>
<tr>
<td>Teacher-student Relations Subscale</td>
<td>0.226**</td>
<td>0.018**</td>
<td>0.020**</td>
</tr>
<tr>
<td>Participation among Stakeholders and Teachers Subscale</td>
<td>0.324**</td>
<td>0.013**</td>
<td>0.013**</td>
</tr>
</tbody>
</table>

Note. **p<0.01.

Table 4.7 Model Fit Statistics of Estimated CFA (no country added), CFA (with countries adding USA and China) and SEM Models (N=5,053)

<table>
<thead>
<tr>
<th>Models</th>
<th>(\chi^2)</th>
<th>df</th>
<th>CFI</th>
<th>RMSEA (90% CI)</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>School climate survey (No country added) 3-factor model</td>
<td>*2240.271</td>
<td>62</td>
<td>0.948</td>
<td>0.083(0.080-0.086)</td>
<td>0.052</td>
</tr>
<tr>
<td>School climate survey (With countries) 3-factor model</td>
<td>*2871.804</td>
<td>72</td>
<td>0.935</td>
<td>0.088(0.085-0.090)</td>
<td>0.054</td>
</tr>
</tbody>
</table>
Among the American teachers and Chinese teachers in the 2018 TALIS, teachers with higher perceptions of relations, profession, and participation had a positive and significant relationship with their overall job satisfactions. The relationship between the perceived disciplinary climate and job satisfactions did not vary significantly between the American teachers and Chinese teachers. Among American teachers, teachers with higher perceptions among stakeholders and teachers tend to have higher level of job satisfaction with work environment. For Chinese teachers, the higher perceptions with the target class autonomy tend to have higher job satisfactions. However, in the SEM model, county (the U.S.; China) as a covariate did affect the teachers’ perceptions on the influence of perceived leadership support between the American and Chinese teachers. In addition, the next qualitative findings take a closer study, bringing associations that have been studied on teachers’ perceptions towards the leadership support between the U.S. teachers and Chinese teachers. The resulting analysis of the qualitative findings will provide more details to reveal how the perceived administrative support among responsibility,

| Teacher-student Relations survey (With countries) | *3078.82 | 72 | 0.910 | 0.091(0.088-0.094) | 0.054 |
| Job satisfaction | *7942.622 | 282 | 0.910 | 0.073(0.072-0.075) | 0.126 |

Note. \( \chi^2 \)=Chi-square test statistic; \( df \)= degree of freedom; CFI=comparative fit index; RMSEA= root mean squared error of approximation; SRMR= standardized root mean square residual; CI= confidence interval

Summary of the Results
autonomy, working conditions and professional development influences teachers’ job satisfactions.

4.4 QUALITATIVE ANALYSIS FINDINGS

The qualitative study focused on teachers’ perceptions of school leadership on the role and functions of administrative support, responsibility, and autonomy, working conditions, and professional development. There are the influential components as identified in the quantitative findings as well. The focus of the qualitative components of this mixed methods study was to gain a deeper understanding of the administrative support features that influence teachers’ job satisfactions in both American and Chinese rural school context. Four themes were identified from the qualitative coding analysis, including (1) the role and function of school administrators, (2) responsibility and autonomy, (3) professional development, and (4) working conditions and relations. Following the results, next chapter discusses the similarities and differences for perceived leadership support on job satisfaction between the experiences of rural teachers in the United States and in China.

4.4.1 QUALITATIVE FINDINGS FOR AMERICAN RURAL TEACHERS

The study revealed common and unique perceptions and experiences of American teachers’ opinions about their administrative support, and decision making toward teacher retention. Most American teachers talked about the low salary but identified other things that effect their decision for staying there, such as the supportive principals, collaboration with colleagues, and autonomy for students, and opportunities for professional development despite the distance to the city to attend conferences. Though the salaries are low, if the teachers have support from the school principals, individual
autonomy, collaboration within the working buildings, growth opportunities towards their career trajectory, most rural teachers expressed a high level of job satisfaction despite the challenges of the rural location and distance to conferences and so forth. In the next section, I present teachers’ perceptions about the role and function of school administrators that contributed to the high level of job satisfaction.

**Role and function of school administrators.** Teachers repeatedly talked about the principal’s role as a school manager in instructional leadership and inclusiveness in decision-making (Johnson et al., 2012). Considering that school administrative support was found to be one of the most important factors in the quantitative study, it is not surprising that the role and function of leadership support was identified as a significant theme in the qualitative analysis.

Teachers’ perceptions of the role and function of school administrators are important to help us understand how school administrators effect teachers’ job satisfaction. Three categories emerged under the American teachers’ interviews, which were support, recognition, and loyalty. Johnson et al. (2012) stated that teachers are “more organized for productive collegial work under a principal’s effective leadership (p. 23)” and suggested that schools are more attractive to teachers when they have effective school leaders. In describing the perception of role of school administrators, American teachers used terms such as “active”, “supporting”, “visible” and “caring”. As one teacher put it, our principal actively encourages people to come and work in the low country. We should actively let people know the rural area is not backward, and we want hard working and friendly people to come and teach in the low country. Similarly, an assistant principal commented, I was on the committee, and I care my people and
children. I show teachers and students the care that I take the time to actively encourage teachers that they can make the rural area a better place. Still another, a senior teacher, states that the leader’s bring community people into the school. After the visibly crazy homecoming week, people you never seen before in your life will be there as well as bring their kids. The principal has told parents, aunts, and uncles to come to volunteer and help. This was community wide and made people involve the community and love it. In other words, the American teachers’ perspectives were centered on a strong belief of leaders’ support for teachers. Teachers feel if the school leaders listen to them, they feel empowered to make a change. When asked about the administrative support for teachers and their decisions, a new teacher stated that she felt like there is more support in the school if the administrator supports them more. In her words,

Before coming into the workforce, this is my first job. The school administrators are my first boss that I have never encountered, so their words are gold. The way discipline or the way that something needs to be improved in and outside a classroom needs to be addressed in a manner that because the issues are not a personal thing. I know as a first-year teacher I got support from my administrator. I have some ideas and I’d like to run by my administrator to have support in place, and we do right now.

The teacher above felt she got the change to innovate and to bring in the ideas that she can learn a lot and that she is more able to change things compared working in the bigger school districts with practicums. Her statement implies that with the support of the school administrator, she perceived that the principal’s role was to provide guidance for them, so she felt she had the capability to change the school for a better place.
Other teachers perceived that the principal’s role was to support and take initiatives to transform the community. One teacher mentioned that the turnover at their school was ten teachers last year, but they recruited teachers from larger areas because of the support of monetary incentives, and she stated that teachers who are teaching in the rural area need a lot of support. She explained, the principal’s role is to get community resources for teachers, for example, building a community garden, collaborating with regional partnerships and organization. She also explained, it is all over our state that a lot of teachers put their own money into the classroom to make something better for the kids. The principal should use their network to connect to other organization to support teachers because a lot of teachers are hardworking that earn that money put it right back into the classroom.

It was notable that from participants’ responses that many teachers perceived the administrators’ support positively and they feel they have the resources they need regardless of community context. A teacher mentioned that the school has a mentor-mentee program in the district. He explained, “the principals have access to the human resource officer who runs that and provides monetary to help with that level. The mentor-mentee program has been helpful for the day-to-day struggle that the teachers are going to encounter with their mentor at the school level.” However, a senior teacher who just returned to the school was skeptical about the rural school would be able to provide her support and resources. She noted, “The supportive administrator needs to listen to the teachers. They need to be loyal to their returning teachers. They need to be loyal to them and support them.” The teacher said as a returning teacher in a rural school, in a Title I school in a critical needs area, administrators shouldn't have to ask their returning
teachers that have been loyal what subject they want to teach or tell them, instead of saying they have got to get somebody else first, administrators need to be loyal to their teachers. She explained that school administrative support was important, meaning that teachers perceived the principal was backing up teachers and listening to the teachers’ needs. She added, “as long as we can approach our administrator and talk with them, she perceived that her concerns and problems have been listened and validated.”

Closely related, several teachers expected principals to be active in their support because rural district were smaller and had fewer district collaborations (human capital, physical, and social) available to support teachers.

Teachers expect principals to be active and visible in the school, asking about what teachers need and providing it for them. Participants perceived administrative support if teachers were asked if there is anything that teachers are needed, or if everything is going well with the teachers. For example, a teacher noted, “The principal needs to be looking around, and coming to the classrooms, and talking to our teachers. We shouldn't see him for just at a board meeting like we’ve never seen him before. Who is that person? We shouldn't have to say who that is to a new teacher.” From the interviewees’ perspectives, principals should be coming around and checking to see if teachers got everything they need.” In other words, the principals should be more seen in the schools. As this teacher put it, “They need to be more active and more visible.” And while the importance of principal visibility has long been established in research on principals’ leadership, the perceptions of these rural teachers indicate that visibility is an important part of their perceptions about job satisfaction. Consider, for example, the
following quotes from teachers who explicitly made the connection between visibility and their satisfaction with their work:

Our principal gave us adequate support through the year. She communicates with us effectively and appropriately. I know one principal we had in the past sometimes sent teachers emails. However, teachers were not experienced, and they didn’t realize do not take it so personal. It might be just constructive. For example, a meeting I attended was about how to communicate and build on own strength and the principal was visible to talk. When we have new teachers, they want to be perfect, but they don’t realize everyone make mistakes. So, a visible principal can find a way to keep new teachers and make them feel they are doing a great job.

A senior teacher extended the importance of actively supporting teachers and described giving teachers’ recognition can keep teachers loyalty to the school and fostering an attractive environment. For example, she noted, “if few teachers to the school described their experience as “discouraging” or “unwelcomed”. The perception of this frustration and discouragement would result in teachers’ feelings as being intentionally “left out”. Another example is for the new teachers who would feel difficult to join the rural community, the school administrative support is significant for encouraging teachers to remain teaching. When a math teacher was asked about employment in a rural school district, he said if would choose a school where he senses administrators are loyal to the teachers. He extended, “Though there are a lot of changes going on in the school environment and thy way they handle stuff, administrators should know the reason why some teachers are leaving and why some teachers are staying, so be
loyal to the teachers. Talk to teachers. Find out why they are leaving or staying.”

Similarly, a 22-year-old science teacher said,

I'm still new teaching and I'd like a little bit more support on reaching out to the ones that are closer, like Ruth Patrick Science Center. They're close, but I don't know how to contact them. Like I know how to contact Mountain, I know how to contact the state museum, I know how to do stuff with the USS Yorktown, but all of those are so far. Ruth Patrick is close. They seem to be more science-geared for middle school and high school, not very geared for elementary school. So, I know about them, I just don't know, I don't feel comfortable communicating with them.

Importantly, this teacher said that the degree to which the principal provided the support would determine his decisions to stay or leave. While the role and function of the administrators varied across all participants, such as the mediator to help teachers relieve pressure during the pandemic, providing personal protective equipment, and transferring to online teaching support. Those teachers specifically focused on their perceived needing support, encouragement, recognition, and loyalty of the rural district.

And so, at least most participants shared similar perceptions that the administrative support for teachers’ mentoring, community building would enhance their job satisfaction. And yet teachers expressed besides the support from the principals and mentorship programs, they need collaboration for responsibility and autonomy. The next theme concerns responsibility and autonomy.

**Responsibility and Autonomy (Governance and Supervision).** Even as teachers followed instructions and perceived administrative support, teachers wanted some autonomy towards their responsibility and jobs. While cross-district collaboration
helps build community and job satisfaction, at the same time teachers want a degree of autonomy. For purposes of my study, autonomy refers to self-governance and the capacity of an agent to determine their own actions through independent decisions within a system of principles and laws within which they operate (Ballou, 1998). Autonomy is an important factor to rate whether the school is in good practice. Teachers’ perceived autonomy has shown to be important for teachers’ commitment and work satisfaction and is also relevant to reduced teacher retention (Ingersoll, 2003; Skaalvik & Skaalvik, 2014).

Perceptions of responsibility and autonomy between the U.S. and Chinese teachers varied to some degree. The U.S. teachers generally perceived themselves to be more individually independent, while Chinese teachers are more collegially oriented. Teachers’ perceptions of autonomy are difficult to measure because teaching is complex and depends on interactions (Hopmann, 2007). In other words, Hopmann (2007) suggests the autonomy of teaching, learning, and instruction are different meanings in different areas. In the rural areas, the perceptions of common core of based education were restrained teaching to some extent.

The U.S. teachers’ perceptions about autonomy can be associated with the Western culture. This culture could be characterized by post-WWII reconstruction of social welfare systems, educational systems, schools, and other organizational entities in both physical and systematic respects. The decentralized reforms in the 1990s that increased local autonomy and municipal responsibility for aligning financial resources and reorganization of schools (Ingersoll, 2003; Wilmers & Ylimaki, 2021). With the growing implications of the No Child Left Behind (NCLB) Act of 2001, high stakes testing and major reform initiatives focusing on accountability. Related to the autonomy,
teachers responded they are accountable for making decisions to make a difference to improve the school’s overall performances. For example, a teacher has been working for three years noted that she perceived the decisions to be mostly made by individual teachers. She said,

I can arrange my own classes. Outside of school opportunities, like field trips and things. It's such a long distance to go anywhere for them to get any experiences outside of the school, that those experiences have to be cut short.

Similarly, another teacher commented the beach cleanup activities she had one day advocating for students,

The whole class came for this activity. The parents would stay with us because I wasn’t doing this through school so I couldn’t be responsible for these children.

We went out and explored the marsh and that was awesome.

The U.S. teachers also mentioned they can extend their teaching autonomy to students on extracurricular practices, such as science teaching. One teacher said the hands-on, science-based learning or hands-on science learning made learning easy. She stated, “We have a science lab, and we have science resources with Foss kits. We stock those kits for teachers, or we go through and find where to spend the money by the end of the year.” Teachers feel organized with these science resources because sometimes it's hard to find stuff and to go buy something. It was good to let teachers know the resources are right there. Some teachers also mentioned after-school programs. An Art teacher said,

We took the students to the theatre see the movie Wonder. Though it was like a 45 minutes’ drive to the theatre, it allowed students to experience the theatre and
ongoing movies, and we read the book. Just like Dewey’s education is life. I am hoping to be able to help students to experience more.

These comments on the resources, autonomy, and the opportunity elevated consideration for teacher’s job satisfactions in a context like this rural district. Autonomy sometimes makes students feel supportive by their teachers and to improve their classroom activities. Furthermore, parts of the interviews said more about working condition is another important component that worth to consider. Many U.S. teachers talk the working conditions in the school and the culture of the school. Participants said they embrace a more positive attitude toward autonomy supportive strategies if the working conditions and cultural of the school is compatible.

**Working conditions and relations.** Teachers’ working conditions refers to the social and physical surroundings of the teachers’ workplace cite. Teachers make their decisions about whether remaining or leave the occupation not only on the level of salary, but also on the quality of their working environment (Ladd, 2011). In my study, teachers’ perceptions of their working conditions included a variety of components, such as the administrative support, professional development opportunities, and the surrounding facilities. For example, a senior social science teacher noted the importance of partnership to help students’ need. He explained, “I know there's a church that partners with our school that helps supply students in need. Not all churches participate in that. I know this church; I think it's Ned's Branch Church. I think that's the one. I can't remember, but I know that they sponsor children in need. I know that we have had grants in the past, and both of those grants have expired now, I guess.” In addition, an assistant principal mentioned another club that will come to the school this year. She explained,
“There is another club, called The Boys and Girls Club, that's coming to our school this year. I just got to talk with the sponsor SCE&G a little bit. That's one of the problems because we don't have a lot of factories. I need to call businesses to help support our school.” Her comments imply the disadvantage for living in a rural area. The assumption that the rural school lacks external fiscal resources, and funding opportunities. The raised needs in the rural community are more likely to benefit from local entities’ presence to help fill these gaps to improve the working conditions for teachers.

Relations refers to the social features especially the relations with school leaders and co-workers and interactions among teachers. Relations are central to teachers’ working conditions on describing the collegiality of the workplace. For the small rural community, close relations are mentioned by participants. For example, a chemistry teacher noted, “If you say that you're a teacher there, they're like oh, where do you teach? And they love the schools, so they seem to love the teachers, and everybody knows everybody.” Similarly, the collegial features in the workplace include the organizational structure, school culture, community support, and inclusive respect in the work environment (Johnson et al., 2005). A second-grade teacher commented,

The assistant principal is leading the instructions and there has been transformative change for the first-year learning curve of what's this school about before they can really step in and implement new things. I can feel comfortable going about the day.” However, some teachers mentioned the issues of small community. A chemistry teacher stated, "Our family lives here, and our cousins live over here. Therefore, there are problems." The rural community is small with close relations, but everyone knows everyone may result in lacking privacy.
From the participants’ comments, we see teachers’ work environment would affect teachers’ commitment to their current school. Considering this is a small community with close relationships, it is essential to support improving its general social mobility. One of the social science teachers I interviewed stated:

That's my hometown. I love the people. I love the community. And I wanted to give the best that I could to the community that I was from. This rural school has smaller class sizes and better period community relationships that help to promote more success among students. It's a more cohesive bond in terms of being able to relate to parents, and parents being able to relate back to you, and emerging issues that materialized in a short period.

**Professional Development.** Teachers’ professional development can influence teachers’ job satisfactions along with salary, professional status, and geographic location (Reininger, 2012). Professional development is important for teachers’ career decisions and address the teacher shortage problem effectively. In the rural area where many new teachers have chosen to begin careers despite well-publicized drawbacks. One drawback is there are not so many professional development opportunities for teachers. A new teacher noted, “I know absolutely nothing. I did get online last night and try to look some things up. From what I could gather, it was something to do with agriculture and how to incorporate that within the schools. I didn't get a lot out of it, so I really don't know anything about it.” Another teacher mentioned their professional learning community (PLC) opportunity in the school is on Tuesdays. She explained, “We want to improve those a little bit more and be more teacher-based. They seem more like another faculty meeting. There's potential there and that's the great thing about being so small though, is
that we can come together and use this time to improve. It is also an opportunity to know everybody in the school and everybody who's in the grade level and content.” Similarly, the principal commented on their professional development opportunities. She explained,

At my school, you have opportunities for leadership and professional growth. If you go to a larger school, you're just a small fish in a big pond, per se. In these types of rural communities, you have an opportunity to thrive and to grow and to advance to be a teacher leader.

Likewise, another school administrator stated the strategies of development:

Honoring your own leadership skills. You have opportunities for professional growth. You have opportunities to make changes that you can build relationship with the students and all stakeholders in the community. And the impact that you're making on these children is visible.

He added,

And in that last mentor meeting through the district, they were very clear that everybody understands we're a training ground. They recruit the teachers from Ohio, Pennsylvania, New Jersey, those areas. Bring them down here, they work for three to five years, and then go back because they realize, at least out county, is challenging.

The principal stated that they are going to concentrate on what makes the rural areas special. They also need to see where our students live, so the people can understand the relationship between the economic, and what needs to be conserved. “You know, like water quality being so important. Because we're on the coast we need to worry about climate change, and the rising waters, and how that will impact them”.
A social science teacher said they have one of these other programs is called Learning About Butterflies. She said, "This is the most amazing professional development I've ever done. I'm never doing How to Use Google in the Classroom again. I'll be doing this." And she explained, "If you like this you've got to do one called The Master Naturalist Program.”

According to the findings from the U.S. rural teachers, we indicate that the role and function of leadership support, the relationship, responsibility and autonomy, and professional development for important perceptions to effect teachers’ job satisfaction. In the next section, I present the findings from the Chinese rural teacher and compared the four themes with the U.S. teachers.

4.4.2 QUALITATIVE FINDINGS FROM THE CHINESE RURAL TEACHERS

There were similar themes despite some contextual policy, cultural differences across the interviews, including the problems of low salaries, long commute time, as well as some differences in perspectives of community, autonomy, and administrator’s functions. The similar conception between the East and West is the profession of teaching. As Fullan (2012) states, the teaching profession is understood as a complex profession that requires continuous learning and development (p. 156). The occupation of teaching in schools in the East countries is also viewed as a comprehensive practice that needs a long-term investment. However, the role of school administrators between the conceptions of Eastern and Western principals are viewed differently. In America, the role of principal is usually viewed as the instructional leader that manages the relationship among teachers, community members, stakeholders, and school board members in the district. In China, the primary responsibility for the principal is to manage
the school performance according to the standards from the Chinese Ministry of Education, which emphasizes a lot on high-stake testing and exams.

In general, the centralized structure of governance makes Chinese school leaders manage support, educational programs, and budget based on the policy from the Chinese Education Ministry. The decentralized structure of governance in the U.S. rural schools gives the leadership committee, stakeholders, and school board members power to make decisions and deal with support, budget, and change. Next, I will discuss the findings on the perceptions from Chinese rural teachers.

**Role and functioning of school administrators.** When asked about rural Chinese teachers’ perceptions of the role of school administrators, a language teacher shared her perspectives about an instructional leader on their curriculum design development. She said,

> We have a curriculum coach. But since there's only one school in the entire district, so the coach has to do kindergarten through 12th grade. But when the coach goes to help the fourth-grade teachers, all the fourth-grade teachers are in one spot. There's no special place that you have to go for everybody to get that help from her. She comes and helps us figure out how to work our SLO's. She helps us with pacing guide designing the curriculum.

The Chinese teacher added,

> We get to do our own pacing guide at the end of the year for the following year. But the coach supports us with that, and shows us resources that we can use, and then in the school when we do faculty meetings or a lot of times, we'll have the
teacher shares where if someone's using something that they love and then they can show it to the rest of us.

Another teacher said, “One of the common supports amongst rural teachers is financial incentives.” He explained,

Local districts in my area are beginning to offer financial incentives, and while they are beneficial, there are bigger and more important issues to be handled first. Other elements, such as technology to me has not always been super important, but parent involvement and the overall school community and support has been.

Participants mentioned not only about their financial incentives, but also the space for professional growth and socialization. A recently recruited music teacher said, 

It's a lot of different things. Where am I going to live? Where am I going eat? What am I going do for socialization? What if I'm new and I don't know anybody? I'd feel like an outsider because everyone from town knows each other, and I just feel like an outsider.

The assistant principal stated,

I had a teacher propose how they investigated a four-day week with an extended day. Because then when you have people that drive five days a week, you might be able to get teachers who would drive four days a week and not five. And then we talked about daycare, child services. And they reported. Well, why couldn't we do that, like the teachers work afterschool programs, have a day school program with enrichment activities on Friday for teachers that want to support their income and parents would still have a place to send their children. It's different. It's
outside of the box, but it might take some out of the box thinking to help resolve the problem.

Even though providing financial incentives can improve recruitment for high need areas, Chinese teachers cared more about the planning support. A special education teacher said, “With special education, their class sizes may be smaller, but the paperwork and administrative duties that come along with it do not balance it out.” She extended, “Some districts provide special education teachers with two planning periods, one for meetings, and the other for planning, but I have not seen that in my district.” The special education teacher explained, “The number one way to develop effective recruiting strategies is to not only ask current educators in the field, but actually being visible and to talk to them and see what they need to want to stay,” explained by this special education teacher.

The administrator’s role is not only to attract candidates with leveraged incentives but also train teachers to conduct effective evaluations. In fact, the Chinese principal may be not satisfactory with the evaluation. He explained,

I do not feel adequately trained to conduct a teacher evaluation. There are evaluation tools, but no one reviews them with you. We are not trained on the process. As a first-year principal, you try it, and you move through the process because it has to be done.

Though the administrator did not describe evaluation meetings, he mentioned the importance of hiring qualified teachers from other area. The principal said,

It is a very small, rural town where everyone knows everybody. However, I do see that teachers may be given the job because they are local and “home-grown”
verses their qualifications. I worry that my school district is passing out wonderful educators to try and keep the “locals”. When you are only concerned with the locals, you are missing an opportunity to see what others could bring to the school, district, town, and county.

Another administrator commented the importance of mentorship for new teachers. He added,

I believe one way to support new teachers, especially in rural districts, is to allow teacher candidates to shadow a senior teacher or two for a couple of days before and after an interview to see if it would be a good fit for them. They will know if they can fit here because this is not typically something teachers can figure out within a matter of five minutes in an interview.

In summary, the Chinese principal made a point of showing mentorship support, financial incentives, and providing instructional coaches are important to make teachers commit to teach in rural area and attract the most committed educators. In order to attract qualified teachers, professional development is perceived highly associated with teachers’ job satisfaction through the work in the district.

**Professional development.** Many Chinese teachers that I interviewed mentioned the “national training” every year. National training refers to a three-day-training for teachers each year before each semester starts. The rural teachers go to an assigned university to take workshops for professional development. One teacher mentioned that the “national training” is one of the most valuable training that she received, because she met the coach in the university. The coach was used to be a middle school teacher, and then got further education for a doctor degree and now is teaching in a university. The
teacher said she learned how her career could be in the next five years. She has a clear goal and direction for her career and working as the special teacher gives her full of confidence from the beginning of the professional career.

In this rural school, many teachers were recruited to this rural area as “Special-post teachers”. The Special-post teachers are the positions that offered by the Chinese government to stimulate rural teachers to work in rural area. Special-post teachers are the open recruitment of college graduate students and qualified social elites who have passions to teach in rural schools (Li et al., 2018; Li & Xue, 2021). The Chinese government implemented the Special-post teachers plan in 2006 to promote the supplementary mechanism of teachers in rural schools. The Special -post teachers in rural schools reduced the problem of insufficient teachers in rural schools in China and improved the overall quality of rural teachers (Chiang, 2019; Li & Xue, 2021). One teacher mentioned that as the Special-post teacher, she received career support from the school leaders, such as mentorship. For example, the “Special-post teachers” will have a senior teacher for them to learn and to observe, so that they can make adaptions to rural education smooth. O’Connell et al. (2008) argue that the capacity to adapt or change mainly responds to various complicated new situations. In other words, in a world characterized by frequent career transitions, only those individuals who are capable of adaptation to the changeable circumstances can thrive and succeed. The principal has a role to play to help rural teachers’ adaptability to teach in the school. As the Special-post teachers put it, administrative support is crucial to raise teachers’ personal adaptability and bolster teachers’ motivation and sense of belonging in dealing with rural areas.
Responsibility and autonomy. The Chinese teachers’ perceptions on responsibility and autonomy are traditionally considered as the responsibility for target classroom autonomy (Burkhoff, 2015) because the teaching content is associated with the national standardized test (Gaokao). The Gaokao, one of the most high-stake tests in the world, is administered every June annual year, and the test score is the sole determinant of whether the students can be admitted to the Universities (Davey et.al., 2007). The central education Ministry control the standardized test and other accountability affect teachers’ autonomy because the preparation for Gaokao starts from as early as the first year of middle school and continues throughout secondary school where educational content is primarily geared toward preparing students for the Gaokao exam (Burkhoff, 2015). The Gaokao is often referred to as a “single wooden bridge to ivory” for millions of Chinese students to attend a prestigious university, and potentially to have a better life afterward (Burkhoff, 2015). Although the U.S. education adopted the standardized tests for SAT and ACT. Students in the U.S. have several chances per year to take SAT or ACT until their scores meet the universities’ requirements. However, in China, there is only one chance per year for Chinese students who take the Gaokao and the chance of getting admitted to their dream college is only one opportunity per year. In comparison, the chances for American students of being admitted to colleges are higher than the students in China (Burkhoff, 2015). The high levels of control and high-stake standardized tests in schooling make teachers heavily responsible on students’ academic performances but have negative effects on teachers’ autonomy. In Chinese rural schools, bureaucracy may consider to be a necessary way to organize education in compulsive schooling system and to decrease feelings of insecurity among teachers, as well as to
improve school quality. Zhang (2019) states despite most research has examined bureaucracy in Western contexts, the applicability of teaching autonomy can be seen to define the role of teachers and reduce the complexity of the work of teaching. The different national, organizational, and cultural contexts make nature of Chinese teachers’ autonomy quite different from the U.S. teachers.

Because of the limitation of qualified teachers in rural Chinese schools, teachers can be assigned to teach two courses in each semester which increased their job responsibilities and lacking the teaching autonomy. One new “special-post teacher” mentioned to teach more than two subjects in one semester. She said, "I was assigned to teacher both math and politics at the same year. The teaching responsibility was heavy, and it would have been much better if I only taught one course.” She reflected,

There were so many courses to teach that I have no time to prepare. I had to go to the library to print out teaching materials every day before class, but the responsibility for teaching and grading the two courses were heavy.

Due to teacher shortages, the special-post teacher had to teach two more courses that were not relevant to her major. She explained, “My major is college was politics and the school also assigned me to teach math courses because they didn’t have enough math teachers. It took me extra time to prepare the unfamiliar subject. Thus, in that semester, I felt tired, and my teaching stress was heavy. I wish I had more autonomy to choose my teaching subjects.”

During the interview, many Chinese teachers hold positive attitude on the communication with students and parents despite they are facing heavy workload every semester because of the teacher shortages. A physics teacher said,
I have confidence in making effective communication with students and parents. During the first three years of my teaching, I gradually learned that different strategies for communication with parents and students. I can understand their difficulties and challenges in terms of different expectations on how to teach their children. So, I am very caring to students and give full attention for students who need support.

In summary, all Chinese teachers mentioned they pour their hearts and souls into teaching but need more autonomy, which means, teachers who are satisfied with their jobs usually perceived autonomy support (Hakanen et al., 2006; Field & Buitendach, 2012). However, many Chinese teachers perceived little autonomy support to unlock teachers’ potential for their active and creative involvement in teaching. Many teachers said they had to teach more than one course in their first three years when they just began to teach. Senior teachers also felt disappointed students who have gained in the classroom may not be continued as they move forward. The less teaching autonomy and heavy responsibility cause resentment and frustration for Chinese rural teachers.

**Teachers working conditions and relations.** The Chinese teachers that I interviewed expressed the increasingly competence among teachers’ relations. Recently, the competition among teachers, individuals seeking promotion or personal recognition, and grade levels are more and more measurable based on students’ standard test results. One teacher stated that “I don’t want to become a mediocrity with teaching. I want my students to have a good academic achievement and then I can be recognized as the teacher of the year.” Another Chinese teacher said that perceptions of teachers’ work are not only based on teaching, but also administrative evaluation. These aspects all transfer
into the ongoing assessments for teachers. The teacher said, “teachers are based on their experience, so it is unfair to evaluate the teachers only based on their students’ performances.” Other teachers mentioned that the overall working conditions in the rural area is not good enough. Though the facilities are complete, but lacking the most advanced tools, such as computers, chrome books, and technologies to make connections with the outside world. The principal said, “My goal is to attract high qualified teachers to come to this rural area to teach by advertising the beautiful scenery and close relationship in this area. He explained,

Well, my concern has been that those nearby suburban areas. But as the leader, and the community member, I hope to make it more of a permanent place for people are chosen to teach and stay. They're going to need to have a reason to stay. Not just a job, but when they are connected to it then they're not going to want to leave because they have good condition to work and live.

His goal is to make teacher like their home, and for them to see how beautiful and unique this area is, so the prospective teachers want to stay there, and to make it their home, and their community.

Regarding the working conditions, the Chinese teachers mentioned are harmonious and collegial. Because in the small rural area, the teachers are all think the best for students. They are united to each other. For example, if the teacher is sick for the work, other teacher will substitute for the class. Because of the rural community is small and close, if students have some difficulties in learning, the teachers will visit the students and take extra time to help the students learn. Particularly in the rural area, as millions of residents flocked to cities in search of work, their children, commonly
referred to as “left-behind children,” remained in their rural hometowns under the care of grandparents, other family members, or relatives. In addition, the number of single-parent families has increased. These factors pose serious challenges to rural children’s education, especially in terms of engaging parents, either individually or collectively through community engagement. The left-behind children in China are the children who remain in rural area while their parents leave to work in urban cities. The teachers said the “left-behind children” need particularly to pay attention because their parents are not besides them. Some children live with grandparents, some are live in the dorms, so teachers and their co-workers often take turns to take care their students. In addition, the participation among stakeholders is perceived positively associated with teachers’ working conditions. The assistant principal said,

I believe that all stakeholders should come together to create a more credible, meaningful, and productive system for teacher, administrator, and school effectiveness evaluations. Teachers are professionals who value their chosen career and would like to work with colleagues who are excited and knowledgeable about their fields and teaching in general.

In summary, from the participants’ interviews, the participation among stakeholders, administrators, and teachers in a system can promotes teachers as professional development to meet the needs of students. A good working condition can increase the instructional quality and develop effective curriculum to benefit to all.

In the end, both the quantitative and qualitative findings demonstrated that some components of perceived leadership that influence Chinese teachers’ job satisfactions in rural contexts are, in many ways, like the U.S. teachers. The quantitative finding shows
significant difference between teachers in two countries in their perceptions on school climate after adding the country as a covariate, regarding the teacher-student relation, the participation among stakeholders, and the perceptions of school’s disciplinary climate. The quantitative finding shows that teachers’ perception of teacher-student relation is positively associated with their perceptions of participation among stakeholders and teachers. Another notable difference is that Chinese teachers have higher perceptions of school discipline and perceived less relations and participations than the U.S. teachers. The third difference is the Chinese teachers also have higher perceptions of environment, profession, and autonomy than the U.S. teachers. With high-stake tests in China, successful Chinese teachers need effectively balance accountability demands with concerns for stakeholders and their professionalism require a high degree of test-oriented and support from principals. The qualitative result also indicates that teachers’ perceived school leadership support influence teachers’ job satisfactions, but the components, such as the role and functions of school leaders, autonomy, professional development are slightly different between the U.S. teachers and Chinese teachers.

4.5 MIXED RESEARCH FINDINGS

I used methods approaches or and combining of both quantitative and qualitative approaches for this research (Creswell & Plano, 2018). When addressing teachers’ perceived leadership support, specifically the experience of teachers that influencing their job satisfaction, mixed methods inquiry, influenced by individual’s theoretical perspective, involves the collecting and analyzing of both quantitative and qualitative data within one study, and when applicable, are used to address issues of power (Schutz et al., 2016). For me, mixed methods approaches are useful when addressing issues of
teacher retainments, especially teachers’ experience issues relate to job satisfaction and profession, because it allows for the thorough examinations of multiple sources of data and can be either quantitative dominant (emphasizing the breadth of experiences) or qualitative dominant (emphasizing the depth of experiences) (Hesse-Biber, 2010).

So, my research used a parallel design to explore the relationships among discipline, collaborative relations, stakeholder participation, learning environment, professional development, and autonomy that impact teachers’ job satisfaction between the United States and China. My study adheres to the components of School Climate Survey and Job Satisfaction Survey and focused on teachers’ job satisfaction as a central construct and tested the hypothesis upon four statistical models. The quantitative portion of the study consisted of 3060 participants (267 women and 79 men) from OECD. It is a 4 Likert scale with anchors of “Strongly disagree” =1, “Disagree” =2, “Agree” =3 and “Strongly agree”=4. The quantitative components of the study centered around these questions: What are the relationships among discipline, collaborative relations, and participation for rural teachers? How do the relationships among learning environment, professional development, and autonomy vary between the rural teachers from the United States and China? Does the country (the U.S.; China) impact discipline, collaborative relations, participation, learning environment, professional development, autonomy, and teachers’ job satisfaction? How do the relationships among discipline, collaborative relations, stakeholder participation, learning environment, professional development, and autonomy that impact teachers’ job satisfaction varying between the rural teachers from the United States and China? In addressing the research questions, key patterns were found in the data. There were significant positive correlations among the variables of environment,
teacher-student relations, participation among stakeholders, professional development, and job satisfactions. These relationships were expected and are often seen in the research literature. Teachers who have higher perceptions in relations, participation, and professional development tend to have higher job satisfactions.

The qualitative component consisted of 24 participants (21 women and 3 men). They were evenly demographically representative. There were 12 rural teachers from Southeastern United States, and 12 rural teachers from Northeastern China. They had not participated in the quantitative survey. The study consisted one-on-one interviews that focused on the participants’ experiences as rural teachers as well as their perceptions on leadership support practices. In integrating the data, I created a matrix of the key quantitative and qualitative findings.

Table 4.8 A Joint Display from a Mixed Methods Design Organized by Four Categories of Teachers’ Perceptions.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Relationships among variables</th>
<th>Teachers in the United States</th>
<th>Teachers in China</th>
</tr>
</thead>
</table>
| Role and function of school        | Climate ~ Discipline (b = -0.134, p<0.005) | -Supportive, active, and visible  
-Provided regular classroom visits and walkthroughs e.g., coming to the classrooms, observing instruction, and providing feedback to teachers | - Advertised recruitment strategies to attract and retain rural teachers  
-Supported new teachers  
-Allowed teacher candidates to shadow a senior teacher |
| administrators                     | Profession ~ Participation (b = 0.274, p<0.005) |                                                                                  |                                                                                  |
| Responsibility and autonomy        | Autonomy ~ Participation (b = 0.107, p<0.005) | -Perceived to be able to make a difference to improve the school’s overall performances | -Recruited special-post teacher” in rural schools  
- Assigned to teach both math and politics at the same semester |
<p>|                                    | Autonomy ~ Relations (b = 0.271, p&lt;0.005)       |                                                                                  |                                                                                  |</p>
<table>
<thead>
<tr>
<th>Working conditions and relations</th>
<th>Environment ~ Participation ($b = 0.469$, $p&lt;0.005$)</th>
<th>Environment ~ Relations ($b = 0.226$, $p&lt;0.005$)</th>
<th>A close community - Perceived as a more cohesive bond in terms of being able to relate to parents, and parents being able to relate back to you - Perceived competitive and collegial. - Took turns collaboratively to take care the stay-at-home children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional development</td>
<td>Profession ~ Relations ($b = 0.182$, $p&lt;0.005$)</td>
<td>Profession ~ Discipline ($b = 0.111$, $p&lt;0.005$)</td>
<td>Attended Professional learning community (PLC) with teachers - Provided opportunities for leadership and professional growth in this rural communities and thrive to become a teacher leader - Attended National training - Participated the national training in the city every year for professional development and confidence building</td>
</tr>
</tbody>
</table>

The findings from the quantitative and qualitative data were compared and contrasted as well as integrated. There were no instances when findings were contradicted. The qualitative data corroborated and expanded upon the quantitative data. The findings also present some of the similarities between the experiences of rural teachers in the United States and China, which is mainly shown through their perceptions on the students, the class and teaching. The mixed finding corroborated between the quantitative and the qualitative data and illustrated the relationship between school

100
climate and teachers’ job satisfaction. The SEM models showed teachers who perceived positive school climate tend to have higher job satisfaction. Moreover, teachers who perceived school climate positively also felt they had higher job satisfaction and the capability to teach. It is also corresponding to the area of the microsystem and mesosystem from Bronfenbrenner’s EST. By interviewing the rural teachers, I found the perceived leadership support shape teachers’ experiences within mesosystem. Based on mesosystem, the class itself is important for teachers to shape their teaching experiences as a teacher, and they have conducted various activities in rural areas as a way of engaging students in learning. Bronfenbrenner’s mesosystem helped to explain the rural teaching practices through focusing on the complexity of the individual’s socio-cultural world that affects teachers’ perceptions and working experience. Another finding is the school district level in the United States and China wherein teachers experience different levels of autonomy in teaching as well as interactions within colleagues and students, which exemplifies how the exosystem impacts the level of the mesosystem (Bronfenbrenner, 1979). In the United States, rural teachers generally perceived themselves to be more individually independent and have autonomy to make decisions about students’ extracurricular activates. In China, rural teachers perceived less autonomy but more collegially oriented to follow teaching procedures according to the national standardized outlines from the Ministry of Education. Though the teachers from United States and China experienced different levels of autonomy, students-oriented teaching practice is one of the criteria for good teaching by TALIS (OECD, 2018), and both countries are line with a global trend educational practice. Interactions between the teachers and students are viewed as active participants where learning interactions
happened autonomously. Bronfenbrenner (1979)’s concept of the macrosystem helps to understand the background of what people tend to do in a society. Both the United States and China is recognized for being competitive in academic achievement. Teachers are not the expectation when it comes to test oriented competition. Especially in China, teachers are working in a competitive situation because students have been educated in a highly competitive social atmosphere where tests are routinized in every aspect of life and competition is internalized in every person. Next, Chapter five will further discuss the findings along with the implications on school leadership trainings and teacher recruitment practices. The discussions will also include the limitations of the study and suggestions for future research.
CHAPTER 5

CONCLUSIONS AND IMPLICATIONS

This chapter will conclude the study by reviewing the findings for each of the research question and engaging with the previous literature of the perceived school leadership. In addition, exploring the results of confirmatory factor and SEM, and qualitative analysis. Next, the chapter discusses practical implications and limitations and opportunities for future study before concluding with final comments on the research.

Discussion and Practical Implications

The results of this study extended the previous research to illustrate how teachers’ perceived school leadership influence teachers’ job satisfaction (Caprara et., 2006). The study contributes to the research literature by adding further evidence about the relationship between the perceived school leadership support, autonomy, disciplinary climate, relations among stakeholder and teachers, and teachers’ job satisfaction from a comparative perspective. The study was conducted in the cross-national context between the U.S. and China, presenting a unique perspective in which explored the commonalities and differences. Bronfenbrenner (1979) ecological system was used to guide to illustrate teachers’ perceptions through their experience and interactions with their surrounding environment. So far, few research has been conducted in a mixed method study in the cross-national context between the U.S. and China to study the effects of perceived school leadership support on teachers’ job satisfaction. My study used 2018 TALIS as
evidence to further investigate the teachers’ perceived school climate on their job satisfactions between the U.S. and China.

In my SEM model, country (US; China) as a covariate does show significant impact on teachers’ perceived school climate. The result shows teachers from China have perceived higher school discipline and work environment than teachers from the United States. Furthermore, the U.S. teachers have higher perceptions of teacher-student relationship and participation among stakeholders than Chinese teachers. Moreover, my quantitative and qualitative findings show the importance of teachers’ professional development despite the long commute time to the city to attend conferences, and to boost the confidence to teach in the rural area (Tran et al, 2015). To help better prepare individuals for rural teaching, the literature has suggested the importance of place-based education that emphasizes cultural relevance and social context (Moyi et al., 2018) or funds of knowledge.

According to Bandura (2002), social-cognitive theory points to the teaching experience, such as autonomy, relations, and work environment are important factors for teachers’ commitment to the profession, which also indicates that teachers adjust their capacities across different cultures, and contexts. Teachers’ perceptions showed the different rural education policies in the U.S. and China impacts teachers’ experience, but different cultures and contexts does not interfere with teachers’ overall experience and their perceptions of school. Bandura’s social cognitive model only did not fully test the reciprocity of effects between teachers’ job satisfaction and teachers’ perceived school climate globally. It is limited to compare the influence of teachers’ perceptions of school climate on their commitment to professionalism among the U.S. and China. For the SEM
model with the country as a covariate, the result showed that autonomy did not contribute
to teachers’ job satisfaction, nor did the participation among stakeholders. This suggests
that teachers’ job satisfaction depends on other factors (cultural, social, political
elements) beyond the tested factors. Teachers’ job satisfaction might also reflect the
influence of teachers’ perceptions over time. Finally, the finding suggests the country
impacts the perceived school climates on teachers’ job satisfaction. This is an important
source for principals to consider cultural contexts on school management, which may
contribute to high participation among teachers and stakeholders and sustaining a
satisfactory work environment.

Thus, I propose the need for future research with a multi-level analytical
framework constructed from my study findings and the literature. Below is a graph
representing the analytical framework.

![Analytical Framework for Future Research](image)

Figure 5.1 Analytical Framework for Future Research
In this framework, I proposed in the Macrosystem level have another two levels of organizational entities that importantly influence the perceived school leadership. Besides the school district level, there is state and national level educational system beyond the school district system. The national policies and governances, and the state policies and governances are factors in the macrosystem influencing the microsystem level on teachers’ job satisfaction. The result of the final SEM model showed the macrosystem level and exosystemic level factors (teacher-student relations, participation among stakeholders and perceived school disciplinary climate) are associated with all the three latent factors on teachers’ job satisfactions (work environment, autonomy, and profession). In addition, the qualitative result showed the mesosystem level and microsystem level factors, such as school leadership support, target class autonomy, professional development, and teachers’ working condition and relations are associated with teachers’ job satisfaction. The findings have important implications for school administrations setting goals to create an effective work environment and meet the needs of teachers. The findings also indicate that teachers with higher autonomy in teaching are more committed to their profession and exhibit higher levels of job satisfaction at work. The new changes for this analytical framework compared to previous framework are the multilevel considerations within the social ecological system at the school workplaces influencing the perceived leadership support towards teachers’ job satisfaction rather than the microsystem which is important to consider in the future study.

Findings from this study encourage future researchers to examine different organizational functions on school leaders that may be applicable to promote teachers’ job satisfactions, particularly among less experienced teachers in rural schools. For policy
makers, the findings suggest establishing a network through which teachers can communicate with each other, including policy makers, school district leaders and the community as well as raising the salary of rural teachers. For school leaders, they should take active roles to provide teacher training, mentorship program, professional development, and information seminars to help teachers focus on teaching with less administrative disruption. The effectiveness of school administrators’ support contributes directly to a higher level of teachers’ job satisfaction. For teachers, they should integrate professional development and training in the rural schools, and collaboratively working with school principals and community members. Teachers should also take professional development as a supplement for improving teaching skills and management strategies. Having a positive perception on the relationship with school administrators can help teachers feel inclusive in teaching and working successfully to fit in all aspects of work.

Understanding the role of teachers’ professional development in a changing policy environment and addressing the challenges of rural adaption of effective leadership practices through focusing on developing a shared instructional leadership and advocating cross-cultural and comparative teaching programs for rural teachers helps to achieve greater job satisfaction for teachers.

**Limitations and Opportunities for Future Research**

Some limitations of this study must be addressed. First, the sample size (N=24) of the qualitative data could have been enlarged if the pandemic had ended. Under the pandemic, I could not enlarge my qualitative data for a gathering more rural Chinese teachers for interviews on the influence of perceived leadership support on teachers’ job satisfaction. Enlarging the sample size could help enrich the story. Second, geographic
differences should be considered in this and future research, especially in this cross-national comparative study. Owing to the different educational policy (decentralization vs centralization), educational resources of schools differ from the U.S. and China. The difference of educational policy between the two countries affected teachers’ commitment and resulted in teachers’ mobility with other, better opportunities. Research has confirmed the social capital, such as economic, regional, and geographical factors, is significantly related to the teachers’ job satisfaction and motivation, especially in China (Sargent & Hannum, 2005). Geographical differences have affected the teachers’ choices because the long commuting in the rural area would add to the inconvenience for teachers. Third, TALIS’s survey could have added on some other psychometric characteristics, such as teachers’ mental health, teaching aspirations, and commitment. These are factors that may affect teachers’ job satisfaction when we look at the impact on the perceived leadership support (Bobbitt, Faupel & Burns, 1991; Brief & Weiss, 2002; Caprara et al., 2006; Chetty, Friedman & Rockoff, 2014; Hallinger & Heck, 2011; Leithwood, Aitken & Jantzi, 2001; Lezotte, 1989; Spillane, Halverson, & Diamond, 2001). Despite these limitations, this study contributes to the research on the influence of school perceived leadership support by confirming the organizational level and individual level are positively associated with teachers’ job satisfaction. The different level of social capital clarifies the paths by which leaders influences on teachers’ autonomy, condition, and commitment effects of the achievement gap in this process. I also developed a better understanding of the complexity of teachers’ commitment for teaching in rural areas by investigating the relationship between autonomy, professional development, disciplinary environment, participation among stakeholders, beliefs, and perceptions of school
principals. For future studies, I suggest that a longitudinal study could focus attention on autonomy and teachers’ retention gap to enrich the knowledge for school improvement and teachers’ overall well-being.

**Conclusion**

From the perspectives of individual teachers, responsibility and autonomy in the classroom are important for teachers’ job satisfaction. Differences in responsibility and autonomy between the two countries are highly significant at the classroom management level. More U.S. teachers perceived themselves to be individually autonomous, whereas Chinese teachers perceived more target classroom autonomy. The U.S. teachers can make decisions and design the extracurricular activities for their students. The rural teachers in the United States have more community engagement opportunities with parents and community members. Chinese teachers usually spend less time on extracurricular activities but take more time on target classroom management and curriculum teaching. Chinese teachers’ dependence on the leadership of school management is higher than the U.S. teachers. Chinese teachers are usually responsible for keeping order in the classroom but do not have the power to organize extended curriculum or extracurricular activities for their students. U.S. teachers tend to have more power on making decisions about extracurricular teaching and management. The assistant principal in the U.S. rural school was perceived as the instructional leader and the head coach. The higher-level autonomy for the U.S. teachers entails higher responsibility for social decision with risks and potential conflicts with students and parents. For Chinese rural teachers, the principal in the rural school was perceived by most of the teachers to be the actor in managing the extracurricular tasks and making decisions on community events. Chinese teachers
perceived more target classroom autonomy when they worked with school administrators. Though Chinese teachers have a lower autonomy level, the principal took the risks for teachers to make decisions of their own accord, so Chinese teachers can focus more on classroom teaching and improving students’ standardized tests.

Furthermore, the study findings show the need for professional development for teachers. As demonstrated in the literature (Caprara et al., 2006; Cockburn, 2000; Day, 2009; Hallinger & Heck, 2011; Ingersoll, 2003; Leithwood, Aitken & Jantzi, 2001; Tran & Dou, 2019) and in my findings, the benefits of professional development to teachers have much potential for rural teacher retentions. The U.S. teachers need not only to develop the skills of teaching but also of the mentorship support from school administrators. Professional development trainings, such as place-based professional development, state and national meetings, and educational seminars are likely to motivate teachers to make a meaningful impact on the lives of their students. Through these trainings, the rural area would benefit most from the growth of qualified teachers (Tran et al., 2020).

Administrators should increase support for teachers through leadership practices. New teachers lacking in experience may have been perceived professional development as a supplement for improving their teaching skills and strategies. The test-oriented educational system in China has led to serious competition among teachers and schools, which may add to teachers’ working load to ensure students’ standardized tests are excellent. The U.S. education system is becoming more and more test oriented as the standardized tests, such as SAT, and ACT, are more often being used nationally and internationally as indicators for determining students’ admissions. Due to the heavy
workload, teachers should not only cooperate, but senior teachers should mentor new teachers to help them fit the school environment.

In summary, teachers’ perceived leadership support is the most important factor in teachers’ job satisfaction and school improvement (Hallinger & Heck, 2011; Leithwood, Aitken & Jantzi, 2001; Spillane, Halverson, & Diamond, 2001) and second only to classroom teachers in impact on student learning (Lezotte, 1989; Leithwood, Louis, Anderson, & Wahlstrom, 2004). My study found that teachers’ perceived school administrators who focused on teachers’ professional development, knowledge, and support could lead to improving and sustaining development for the school. In other words, teachers who perceived administrators’ support through autonomy, professional development, collaborative working conditions, and school relations had greater job satisfaction and indicated they wanted to stay in the teaching profession. There are some similarities from the rural U.S. teachers and rural Chinese teachers. Teachers from the United States and China consider school administrators as playing a significant role in promoting teachers’ job satisfaction. Though the importance of collaboration has been examined in schools across the world (Day, 2009; Ingersoll, 2003; Webb et al., 2004), not so many literatures covered the influence of perceived leadership on rural teachers’ teaching experience. My finding suggests that school administrators should support teachers’ professional development and encourage teachers’ commitment to stay in the rural areas, but also should mediate the negative impact of different levels of working experiences and create opportunities for schools’ community engagement in local entities. The finding is particularly important for novice teachers who are just starting to work in rural areas. Novice teachers who transplanted to rural schools with less
experience to teach often considered themselves as outsiders, worried about their teaching and promotion, and had a hard time fitting the mainstream of the school organizational life.

With teacher shortages, many countries including the United States are relying heavily on international teachers and looking specifically for teachers from nation states like China, Argentina, and Jamaica where a lot of teacher immigrants originated. A mixed method study yielded more information than what we had in the literature. The quantitative analysis based on a large sample of investigation can draw a generalization of the finding. However, with growing numbers of participants in the OECD’s Teaching and Learning Survey (TALIS) study, a social survey often only contains a series of related questions related to teaching and working designed to measure the characteristic or viewpoint of a respondent. Due to variation in culture, language, and social norms, teachers from different countries may respond to these questions differently. Then the qualitative study is helpful to expand data and analysis to provide a detailed picture across teachers from different countries. The qualitative analysis from teacher interviews can deepen the understanding of the perceptions of teachers and reveal different aspects of the teaching profession of rural teachers (e.g., teachers’ job satisfaction, professional development opportunities, and self-efficacy). Additionally, a cross-national comparison of two economic and academic powerhouses is helpful given the large number of international teachers and immigrants in the United States and increasingly in China and other countries. I believe the approach used in this article can have a wide range of applications. The comparability of the scales, for instance, economy, policy, governance, school district and community and school leadership support, across the United States
and China, can help make sense of the key aspects of the structures in educational systems from the two countries and help policy makers, district, and school leaders to understand and help researchers learn from each other to make the best working conditions and strategies to retain rural teachers.
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APPENDIX A

IRB APPROVAL LETTER

INSTITUTIONAL REVIEW BOARD FOR HUMAN RESEARCH
APPROVAL LETTER for EXEMPT REVIEW

Jingtong Dou
619 King Street
Apt 905
Columbia, SC 29205-2367
Re: Pro00111833

Dear Ms. Jingtong Dou:

This is to certify that the research study The Influence of Perceived Leadership on Teachers’ Job Satisfaction: A Comparative Study between the United States and China was reviewed in accordance with 45 CFR 46.104(d)(2) and 45 CFR 46.111(a)(7), the study received an exemption from Human Research Subject Regulations on 6/21/2021. No further action or Institutional Review Board (IRB) oversight is required, as long as the study remains the same. However, the Principal Investigator must inform the Office of Research Compliance of any changes in procedures involving human subjects. Changes to the current research study could result in a reclassification of the study and further review by the IRB.

Because this study was determined to be exempt from further IRB oversight, consent document(s), if applicable, are not stamped with an expiration date.

All research related records are to be retained for at least three (3) years after termination of the study.

The Office of Research Compliance is an administrative office that supports the University of South Carolina Institutional Review Board (USC IRB). If you have questions, contact Lisa Johnson at ljw@mailbox.sc.edu or (803) 777-9670.

Sincerely,

Lisa M. Johnson
ORC Assistant Director and IRB Manager
APPENDIX B

ITEMS FOR SCHOOL CLIMATE SCALES

**T3DISC: Perceived disciplinary climate**

TT3G41: How strongly do you agree or disagree with the following statements about this <target class>?


TT3G41A: When the lesson begins, I have to wait quite a long time for students to quieten down

TT3G41B*: Students in this class take care to create a pleasant learning atmosphere

TT3G41C: I lose quite a lot of time because of students interrupting the lesson

TT3G41D: There is much disruptive noise in this classroom

**T3STUD: Teacher-student relations**

TT3G49: How strongly do you agree or disagree with the following statements about what happens in this school?


TT3G49A: Teachers and students usually get on well with each other.
ITEMS FOR SCHOOL CLIMATE SCALES CONTINUED

TT3G49B: Most teachers believe that the students’ well-being is important.

TT3G49C: Most teachers are interested in what students have to say.

TT3G49D: If a student needs extra assistance, the school provides it.

**T3STAKE: Participation among stakeholders, teachers**

TT3G48: How strongly do you agree or disagree with these statements, as applied to this school?


TT3G48A: This school provides staff with opportunities to actively participate in school decisions.

TT3G48B: This school provides parents or guardians with opportunities to actively participate in school decisions.

TT3G48C: This school provides students with opportunities to actively participate in school decisions.

TT3G48D: This school has a culture of shared responsibility for school issues.

TT3G48E: There is a collaborative school culture which is characterized by mutual support.

* Item was reverse coded. Source: OECD, TALIS 2018 Database.
APPENDIX C

ITEMS FOR JOB SATISFACTION SCALES

**T3JSENV: Job satisfaction with work environment (subscale)**

TT3G53: We would like to know how you generally feel about your job. How strongly do you agree or disagree with the following statements?


TT3G53C*: I would like to change to another school if that were possible

TT3G53E: I enjoy working at this school

TT3G53G: I would recommend this school as a good place to work

TT3G53J: All in all, I am satisfied with my job

**T3JSPRO: Job satisfaction with profession (subscale)**

TT3G53: We would like to know how you generally feel about your job. How strongly do you agree or disagree with the following statements?


TT3G53A: The advantages of being a teacher clearly outweigh the disadvantages

TT3G53B: If I could decide again, I would still choose to work as a teacher.

TT3G53D*: I regret that I decided to become a teacher
ITEMS FOR JOB SATISFACTION SCALES CONTINUED

TT3G53F*: I wonder whether it would have been better to choose another profession

T3SATAT: Satisfaction with target class autonomy

TT3G40: How strongly do you agree or disagree that you have control over the following areas of your planning and teaching in this <target class>?

TT3G40A: Determining course content
TT3G40B: Selecting teaching methods
TT3G40C: Assessing students’ learning
TT3G40D: Disciplining students
TT3G40E: Determining the amount of homework to be assigned

*Item was reverse coded. Source: OECD, TALIS 2018 Database.
APPENDIX D

INTERVIEW INVITATION LETTER

The Influence of Perceived Leadership on Teacher Job Satisfaction:

A Comparative Study between the United States and China

Dear ________________.

My name is Jingtong Dou. I am a doctoral student in the Education Department at the University of South Carolina. I am conducting a research study as part of the requirements of my degree in Ph.D. in Educational Leadership and Policies.

I am reaching out to invite you to participate in a research study on administrative support necessary to retain teachers in Chinese and American rural schools. The purpose of the study is to 1) identify the leadership support associated with teachers’ job satisfaction and retention 2) compare the similarities and differences between the leadership in rural schools in the U.S. and China that promote long-term retention of teachers. If you decide to participate, you will be asked to meet with me for an interview to discuss administrative support for teachers in rural schools. In particular, you will be asked questions about your educational background, teaching experience, professional development, plans, and your perceptions of the school leadership and their support. You do not have to respond to any questions that you do not wish to answer. The meeting will take place via Zoom or DingTalk at a mutually agreed upon time and may last up to 60 minutes. With your permission, the interview will be audio recorded to transcribe what is discussed accurately. The digital copy will only be reviewed by members of the research
team of the study. Participation is confidential. Study information will be kept in a secure location at the University of South Carolina. The study results will be presented at my dissertation defense, but your identity will not be revealed.

I am happy to answer any questions you have about the study. You may contact me via email at jdou@email.sc.edu. You can also contact my faculty advisor, Dr. Peter Moyi, via email at MOYI@email.sc.edu

If you have any additional questions, you may contact the Office of Research Compliance (1600 Hampton Street, Suite 414 Columbia, SC 29208) at (803)777-6670

https://sc.edu/about/offices_and_divisions/research_compliance/irb/

Thank you for your consideration. I appreciate your willingness to consider participating in this study.

Best regards,

Jingtong Dou, Primary Investigator

Doctoral candidate, University of South Carolina
APPENDIX E

TEACHER INTERVIEW PROTOCOL

The interview protocol is adapted as a secondary analysis using my conceptual framework to analyze the influence of perceived leadership on teacher job satisfactions.

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background information</td>
<td>Could you introduce yourself name, (educational background, and years of teaching)?</td>
</tr>
<tr>
<td>Recruitment/Retention</td>
<td>What aspects of your practicum teaching experiences best prepared for your teaching in this district?</td>
</tr>
<tr>
<td></td>
<td>What additional experiences. If any would you recommend to best prepare future teachers teaching in this district?</td>
</tr>
<tr>
<td></td>
<td>What do you see as the advantages of teaching in this district?</td>
</tr>
<tr>
<td></td>
<td>What do you see as the disadvantages of teaching in this district?</td>
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<tr>
<td></td>
<td>What do you think is needed to encourage teachers to take a teaching position in this district?</td>
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<tr>
<td>Teaching and Learning Support</td>
<td>Please describe your experiences with moving into this district (probe for how they were treated, felt welcomed or marginalized)</td>
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<tr>
<td>-----------------------------</td>
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<tr>
<td></td>
<td>What resources from the community do you currently use in your teaching?</td>
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<tr>
<td></td>
<td>What resources from the community do you currently use in your teaching?</td>
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<tr>
<td></td>
<td>What advice would you give to help improve rural/this district teacher recruitment?</td>
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<tr>
<td></td>
<td>What advice would you give to help improve rural teachers retention?</td>
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<tr>
<td></td>
<td>What type of administrative support do you think is critical for the retention of non-new teachers in their first five years of teaching in general? And what additional administrative support (if any) would be important for non-new teacher retention in a rural setting like this district?</td>
</tr>
<tr>
<td>Community Engaged Teaching</td>
<td>Please describe a memorable incident about teaching in this district (curriculum/teaching)</td>
</tr>
</tbody>
</table>
Describe what you see as the future for the community in which you teach. How, if at all, do you prepare students to sustain and further develop the positive aspects of the community?

Please describe your community. What are the strengths or positives of living in your community? What are the limitations of living in your community?

What do you want your students to know about their community?

How do you and your colleagues work with your community?

Please tell me about how you know about school climate. Probe for how the school climate have influenced by the principal into foster into daily learning and teaching.

Is there any other information or comment you would like to provide about your perceptions of teaching in this school?