AN EXPLORATORY SEQUENTIAL STUDY OF CHINESE EFL TEACHERS’ BELIEFS AND PRACTICES IN READING AND TEACHING READING

A dissertation submitted to the Kent State University College of Education, Health, and Human Services in partial fulfillment of the requirements for the degree of Doctor of Philosophy

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This mixed-methods study explored characteristics of Chinese EFL teachers’ beliefs of reading and teaching reading. In addition, it investigated the relationship between English as a foreign language (EFL) teachers’ stated beliefs and their actual practices. Specifically, two relationships were explored in this study. The first one was whether EFL teachers’ stated beliefs about reading are in/consistently indicated in their stated beliefs about teaching reading. Second, the study also aimed to understand whether EFL teachers’ stated beliefs about how they teach English reading are consistent with their actual practices in classrooms.

Participants in the study included 96 university EFL teachers who were faculty members from three different universities in a city in Northeast China. Within an exploratory sequential mixed-methods design, data collection and analysis occurred in two phases. The first part was a quantitative survey of 10 open-ended questions modified according to Burke Reading Interview (BRI). It solicited the participants’ beliefs about reading and teaching reading. Statistical analysis was then conducted to describe the data collected in this quantitative part. For the second, qualitative part, classroom observations were used to collect data on teachers’ actual practices.

The findings of the study showed that three theoretical orientations about reading (behaviorism, cognitivism, and constructivism) were matrixed with three different belief
systems (dominant, dual, and multiple belief systems). The matrix indicated a complex belief system about reading and teaching reading among these EFL teachers. Within the matrix, relationships among different beliefs were non-linear and unpredictable. In terms of the constructivist theoretical orientation, the findings indicated a statistically significant but weak association between stated beliefs about reading and stated beliefs about teaching reading. The findings also indicated both consistencies and inconsistencies, with inconsistencies being more prominent between stated beliefs about teaching reading and actual practices in the classroom. The study finally discussed the findings based on the three research questions and provided implications for EFL teachers and teacher team leaders.
DEDICATION

To my late father and grandparents, for their kindness, devotion, and loving memory to guide me to where I am.
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CHAPTER I
INTRODUCTION

Statement of the Problem

Numerous studies on the complex relationships between teachers’ beliefs and practices have been conducted over the past decades (e.g., Ashton, 1990; Borg, 2003, 2006, 2009, 2011; Farrell, 1999; Farrell & Bennis, 2013; Farrell & Lim, 2005; Johnson, 1992). Shifted paradigms from behaviorism to constructivism steered educational researchers from a unidirectional emphasis on the relationship between teacher behaviors and student achievements to the correlates of teacher cognition and beliefs with their teaching practices (Fang, 1996). As the connection between theories and beliefs plays an important part in guiding teachers to perceive, analyze, and make decisions in class (Clark & Peterson, 1986; Munby, 1982), studies on the topic are highly needed (Farrell, 2007; Kuzborska, 2011). However, there is a lack of research on related topics (Borg, 2003; 2006). Particularly, little work has been done on in-service college teachers’ beliefs and practices in an English-as-a-foreign-language (EFL) university context (Borg, 2009).

Breen and colleagues (2001) outlined four points as to why studies on the beliefs of language teachers are important: They enable research to go beyond description towards the understanding and explanation of teacher action; provide insights and reflection for teacher development; align any innovation in teaching practices with the teachers’ beliefs; and contribute to language pedagogy by enriching the traditional teaching methodology.
A brief historical analysis helps identify the current state of the study topic. The 1960s through the 1980s was an emerging stage when researchers reached consensus on a unidirectional relationship between teacher behaviors and student achievements; or, that teachers’ beliefs and practices influenced students’ academic performance in either a positive or negative way (Brown, 1968; Jackson, 1968; Lortie, 1975; McDonald & Elias, 1976; Shulman, 1986a). The 1990s through the 2000s was a developing stage when scholars held two competing themes on teacher beliefs and practices (Fang, 1996). One theme proposes that there is a consistent relationship between teacher beliefs and practices (Johnson, 1992; 1994; Kinzer, 1988; Kinzer & Carrick, 1986; Konopak et al., 1994; Leu & Kinzer, 1987; Michell, 1991), whereas the other theme states that connection between teacher beliefs and instruction is inconsistent (Ng & Farrell, 2003; Richardson et al., 1991; van der Schaff et al., 2008). After the 2000s researchers attempted to explore the beliefs and practices of language teachers from a sociocultural perspective, regarding the relationship between teacher beliefs and actual teaching as interactive and complex (Borg, 2011; Breen et al., 2001; Farrell & Lim, 2005).

While numerous studies have been done on teacher beliefs and practices in pre-kindergarten-12 settings in the United States (e.g., Davis & Wilson, 1999; Richardson, Anders, Tidwell, & Lloyd, 1991), there is still a dearth of literature on this topic in the EFL context (Borg, 2009; Johnson, 1992). Farrell (2007) especially noticed more research was needed on the topic as a way to arouse EFL teachers’ awareness of how and to what extent their beliefs could be reflected through their classroom practices. Johnson (1994) advocated that EFL teachers do more research to ‘question those beliefs in the
light of what they intellectually know and not simply what they intuitively feel” (p. 439). However, research on the Chinese EFL teachers’ beliefs and practices is relatively scarce and less-developed (Gu, 2017). It dates back only to 2003, when a team of experts in China was formed to work on the topic of Chinese EFL college teachers’ practices and professional development, in a national project funded by the Chinese National Research Center for Foreign Language Education (Gu, 2017; Wu, 2005). In the national project, while the topic of teachers’ beliefs and practices (particularly regarding the teaching of reading) was mentioned, it was still far less-developed (Gu, 2017). The current study thus attempts to focus on the topic and addresses the gap in the professional literature.

**Purpose of the Study**

This mixed-methods study aims to investigate the characteristics of Chinese EFL teachers’ beliefs and the relationships between EFL teachers’ stated beliefs and their actual practices. Apart from the characteristics of the Chinese EFL teachers’ beliefs, there are two relationships to be explored in this study. Firstly, the study explores if EFL teachers’ stated beliefs about reading are inconsistently or consistently indicated in their stated beliefs about teaching reading; or, if how they define or perceive reading informs how they perceive teaching reading. Secondly, the study attempts to understand if EFL teachers’ stated beliefs about how they teach English reading are consistent with their actual practices in classrooms.

**Research Questions**

This study addresses two primary research questions on the relationship between beliefs and practices. However, prior to the two relationship questions, a question about
characteristics of teachers’ beliefs was addressed to better understand the studied belief system. Therefore, three research questions guided this study.

1. What are the characteristics of the Chinese EFL teachers’ beliefs about English reading and reading instruction?

2. Are the Chinese EFL teachers’ stated beliefs about English reading consistently indicated in their stated beliefs about teaching reading?

3. Are the Chinese EFL teachers’ beliefs about reading and teaching reading consistently indicated in their actual practices?

The stated beliefs were solicited in written form through surveys. Survey responses in the written form provided data for Research Question 1 and 2. Research Question 3 focused on the relationship between the written form (how they think) and the action (how they behave).

**Significance of the Study**

The study is significant in contributing to an undeveloped area in EFL education, particularly in the Chinese context. First, with the existing literature on EFL teacher beliefs, researchers used to focus on K-12 teachers, rather than college/university teachers (Borg, 2006; Johnson, 1992). Wu (2005) especially suggested making efforts to study college EFL teachers’ beliefs and practices in teaching reading, to contribute to the far less-developed topic in the field. Therefore, this study addresses the above gaps in the professional literature by giving a comprehensive description on university teachers’ beliefs and practices in the Chinese EFL context.
Second, as for the theoretical contribution, most of the existing literature on teachers’ beliefs and practices focuses on a single theoretical perspective. For example, some literature (e.g., Ajzen, 2002; Ernest, 1998; Nespor, 1987) focuses on explaining the sociocultural factors causing inconsistency between beliefs and practices by quoting theorists represented by Vygotsky (1978); some studies (e.g., Bean & Zulich, 1992; Borg & Gall, 1989; Thomas, 1989) focus on explaining the inconsistency from the perspective of a lack of pedagogical knowledge by quoting Shulman (1986). However, few studies have ever been done to think about how the sociocultural and the pedagogical factors contribute together to teachers’ beliefs and practices, or which factor outperforms the other in explaining the inconsistency between beliefs and practices.

Third, as regards the contribution to the teacher education field, particularly in the Chinese EFL context, the study can help teacher education scholars think about if their teacher education programs have some weakness when trained teachers think in one way but act in another way.

**Conceptual Frameworks**

A conceptual framework helps researchers with systems of theories, concepts, assumptions, and beliefs that are used to inform the design of their research (Maxwell, 2005; Miles & Huberman, 1994; Robson, 2002). A conceptual framework covers three constructs. First, it helps researchers identify the *theoretical perspective* they use to develop their research, test their research hypotheses, and interpret their research data. Second, it helps researchers map out the *process* of doing their research, the specific stages that their research may go through, and how they connect one stage with another.
This relates to the research design, which helps researchers prove how they can carry out the research. The last construct is the research paradigm, which relates to a researcher’s epistemology and ontology and is used to explain both what the researcher thinks the knowledge is and how he/she thinks knowledge can be formed. For example, if a researcher’s paradigm is rooted in positivism, he/she will probably use a quantitative design to conduct his/her research. However, the three constructs in a conceptual framework are not clear-cut; they often overlap or are embedded within one another (see Figure 1).

Therefore, the conceptual framework is determined by the research method used. As this study is mixed-methods, it adopts a pragmatism paradigm which includes both quantitative and qualitative designs. A quantitative design entails features of positivism, and a qualitative design primarily entails design features of constructivism, particularly for the socio-constructivism in the study. To be more specific, positivism paradigm is used to investigate the inconsistency or consistency between teachers’ beliefs and their practices and to review the literature on this topic. In addition, constructivism paradigm is used to examine the relationship between beliefs and practices from a dynamic and complex perspective instead of a single and static perspective.
Figure 1. Conceptual framework of teachers’ beliefs and practices
Summary

In this chapter, I provided statement of the problem, purpose of the study and research questions. I also depicted conceptual framework and then explained significance of the study. In addition, I listed working definitions of specific terms in the study. For example, reading beliefs and teaching beliefs that were included in BRI, and behaviorism, cognitivism, and constructivism that were included in DeFord Theoretical Orientations of Reading profile (TORP). BRI was used in the study to collect teachers’ responses and TORP was used to explain different theoretical orientations indicated in the responses.

The following chapters of the dissertation include: Chapter II, a literature-review chapter mapping out the changes, achievements, and gaps in the field of EFL reading teacher’s beliefs and practices. Chapter III is a methodology chapter based on the rationale of the mixed-methods design, and procedure of data collection and analysis. Chapter IV is the findings chapter in which I describe both the statistical results of the relationships between beliefs and practices among these EFL teachers and the qualitative descriptions of the specific cases. The last chapter, Chapter V, discusses the three research questions based on the findings. It also provides implications for teachers and teacher team leaders.

Definitions and Terms

Burke Reading Interview (BRI) BRI is used to understand readers’ beliefs about reading and influences to their reading beliefs from their past or current reading instructions.
**English as a foreign language (EFL)** EFL refers to English learning and teaching in a non-English-speaking region. It is sometimes referred to as *ESL* (English as a second language). However, to be more specific, ESL is usually connected with the countries that officially regard English as a second language. In China, while English is the foreign language with the largest number of people learning and speaking it, it is not officially a second language.

**Reading beliefs** Reading beliefs are people’s personal perceptions and understanding of what reading is about. They can relate to specific reading theories or reading models. For example, a person who regards reading as primarily a means to learn vocabulary and get information is usually in a bottom-up reading predisposition.

**Reading instruction** Reading instruction refers to the practice of teaching reading.

**Behaviorism** Behaviorism, also termed behavioral psychology, is a theory of learning holding that all behaviors are acquired through conditioning.

**Cognitivism** Cognitivism is a response to the limitations of behaviorism. Cognitivism incorporates mental structures and processes into humans’ learning. Cognitivists do not require an outward exhibition of learning but focus more on the internal processes and connections that take place during learning.

**Constructivism** Constructivism is a theory of knowledge that argues that humans generate knowledge and meaning from an interaction between their experiences and their ideas.
CHAPTER II
LITERATURE REVIEW
On Teachers’ Beliefs

Studies investigating the complex relationships between teachers’ beliefs and practices have been conducted over the past few decades (e.g., Ashton, 1990; Borg, 2003; 2006; 2009; 2011; Farrell, 1999; Farrell & Bennis, 2013; Farrell & Lim, 2005; Johnson, 1992). The changes of the research foci are determined by the shifted paradigms; therefore, educational researchers, from behaviorism to constructivism, steered from a unidirectional emphasis on the relationship between teachers’ behaviors and student achievements to the correlations between teachers’ cognition and beliefs and their teaching practices. Student achievements led teachers to reflect on their practices, which then enriched teachers’ beliefs. In this review of literature, I describe how studies on EFL teachers’ beliefs and practices changed from an emerging stage to the current stage.

Defining Teachers’ Beliefs

Defining teachers’ beliefs is indeed difficult. Borg (2001) stated that, “despite its (belief’s) popularity, there is as yet no consensus on meaning, and the concept has acquired a rather fuzzy usage” (p. 15). Early scholars did not define teachers’ beliefs in a clear way; rather, they introduced the concept of teachers’ beliefs by elaborating on origins and classifications. For example, Lortie (1975) proposed that teachers’ beliefs originate either from their personal experiences as students, or from their personal life
experiences such as family traditions, values, social interactions, community participation, and so forth. Clark and Peterson (1986) classified teachers’ thought processes into three categories: 1) teacher planning, 2) teachers’ interactive thoughts and decisions, and 3) teachers’ theories and beliefs. Nespor (1987) viewed teachers’ beliefs as being affective and narrative in nature, and pointed out that the classroom demands the affective and evaluative method of decision-making. For example, a teacher might believe boys are better than girls in mathematics and thus assign different class tasks to boys and girls in class.

Although the study of teachers’ beliefs was highlighted as a key category, there had been little research about the difference between teachers’ beliefs and other psychological constructs such as teachers’ knowledge and attitudes in the late 1980s and the early 1990s. Therefore, Shulman (1986b) termed this period “the missing paradigm,” when researchers overemphasized the knowledge of classroom practice and managerial skills by neglecting content area knowledge. Researchers thus embarked upon studies on teacher cognition, however, their emphasis was restricted only to teachers’ decision-making, leaving aside the content knowledge upon which decisions are made (Meloth et al., 1989).

Pajares (1992) contributed to the topic of teacher beliefs and presented a summary that has been regarded as the most comprehensive review of the 1990s (Fang, 1996). While researchers acknowledge the importance of teachers’ beliefs on the classroom decision-making process, they remain unclear about the definition for such a concept due to its large scope. Pajares further defined beliefs as “an individual’s judgment that can
only be inferred from a collective understanding of what human beings say, intend, and do” (p. 316). Apart from defining teachers’ beliefs, he also discussed what might be covered in the study of teachers’ beliefs:

As with more general beliefs, educational beliefs about are required -- beliefs about confidence to affect students’ performance (teacher efficacy), about the nature of knowledge (epistemological beliefs), about causes of teachers’ or students’ performance (attributions, locus of control, motivation, writing appreciation, math anxiety), about perceptions of self and feelings of self-worth (self-concept, self-esteem), about confidence to perform specific tasks (self-efficacy). There are also educational beliefs about specific subjects or disciplines (reading instruction, the nature of reading, whole language) (p. 316).

Based on Pajares’ above classifications, scholars further divided teachers’ beliefs into explicit and implicit ones. Espoused or explicit beliefs are what a person can readily articulate (Johnson, 1992), and implicit beliefs are held unconsciously and inferred from actions (Argyris & Schön, 1974; Breen et al., 2001). However, Borg (2011) stated that there is some disagreement on conscious vs. unconscious beliefs, with some people regarding consciousness as an inherent attribute of beliefs, and the others holding that beliefs can be either conscious or unconscious.

The concept of teachers’ beliefs now refers to the evaluative or appraisal propositions that teachers hold unconsciously or consciously as true when teaching (Borg, 2001). It is often used to characterize the cognitivist structures that teachers bring when making classroom decisions (Meirink et al., 2009). Kalaja & Barcelos (2003) defined
beliefs with dynamic, complex, and contradictory attributes. In other words, beliefs are socially and individually constructed, and can be shared, diversified and uniform. This unique changing feature leads beliefs to form a complex and multilayered system (Kalaja & Barcelos, 2011; Mercer, 2011).

In the second language (L2) literature, Barcelos (2006) explained teacher beliefs from the normative, metacognitive, and contextual perspectives; beliefs were thus defined as opinions or generally inaccurate myths (normative), idiosyncratic knowledge or representations (metacognitive), or ideas interrelated with contexts and experiences of participants (contextual).

Features of Teachers’ Beliefs

Abelson (1979) identified seven features of a belief system that makes it different from a knowledge system: “1) being non-consensual; 2) denoting existential entities such as God, witches etc.; 3) acknowledging ‘alternative worlds’; 4) relying on evaluative and affective components; 5) including episodic material such as folklore and cultural experiences; 6) having open boundaries (including self-concept); 7) holding variable credence and having varying degrees of certitude” (as cited in Woods & Cakir, 2011, p. 383). Abelson’s classification of belief features distinguishes beliefs from knowledge in terms of the scope of truth. For beliefs, truth is individual, personal, and subjective; for knowledge, truth is objective and universal. From a theoretical, cognitivist science perspective, Abelson discussed the beliefs in general, rather than specific beliefs in reading or teaching.
Barcelos and Kalaja (2011) further studied and summarized eight characteristics of beliefs: “1) fluctuating; 2) complex and dialectical; 3) related to the micro- and macro-political contexts and discourses; 4) intrinsically related to other affective constructs such as emotions and self-concepts; 5) other-oriented; 6) influenced by reflection and affordances; 7) related to knowledge in intricate ways;” and “8) related to actions in complex ways” (pp. 285-286). Barcelos and Kalaja’s classification embodies the tenets of sociocultural theory, which pays attention to the context in language education; it also attaches great importance to the complexity of a studied construct (Larsen-Freeman, 1997), emphasizing that the study of an emergent construct results from the study of its individual components.

**Teachers’ Cognition and Beliefs**

In 1968, Phillip Jackson wrote his masterpiece *Life in Classrooms* to describe and analyze teachers’ mental constructs and cognitivist processes. He believed that these constructs drive teachers’ behaviors. Afterward, teachers’ cognition and thought processes began to attract researchers’ attention, particularly for those working in the field of literacy education (Fang, 1996). Since the mid-1970s to the early 1980s, the majority of studies were conducted on how teachers’ thought processes helped teachers design and manage their classrooms, and assess their students’ understandings (McDonald & Elias, 1976; Shulman, 1986a). Teachers during this time viewed instruction as a means to deliver information and students as persons who decode the information. “Teacher’s responsibility basically ends when they have told students what they must remember to know and do” (Sedlak, 1987, p. 320). Neither the concept of
teachers’ beliefs nor teachers’ cognition was highly studied during this time, because educational research focused more on the teaching instead of the teachers. While the decoding way is relatively dated now, it remains popular in some developing countries, or EFL settings.

**Teachers’ Beliefs and Practices**

Research during the 1960s confirmed the consistent relationship between teachers’ beliefs and their actual practices. Brown and Webb (1968) found that teachers’ behaviors are strongly influenced by their beliefs about teaching. Brown (1962; 1963; 1966; 1967a; 1967b; 1968a; 1968b; 1968c; 1968d) then published a series of publications showing that “specific fundamental philosophic beliefs of teachers are even more consistently related to the observed classroom behavior of teachers than are their educational beliefs.” Similar to Brown’s findings, Harvey and his associates (1964; 1965a; 1965b; 1966) found that teachers’ belief systems have a positive effect on teachers’ behaviors. Gordon and Combs (1968) also identified a series of concepts of the teachers’ roles related to their actual teaching. The National Institute of Education (1975) reported that teachers’ behaviors are “directed in no small measure by what they think” (p. 5).

Apart from the studies on the relationship between teachers’ beliefs and practices, scholars continued to explore the origins of teachers’ beliefs. Lortie (1975) stated that most teachers’ teaching is almost identical to that of their prior teachers, which is termed as “apprenticeship of observation”:

Teaching is unusual in that those who decide to enter it have had exceptional opportunity to observe members of the occupation at work; unlike most
occupations today, the activities of teachers are not shielded from youngsters. Teachers-to-be underestimate the difficulties involved, but this supports the contention that those planning to teach form definite ideas about the nature of the role (p. 65).

Zeichner and Tabachnick (1981) agreed with Lortie’s explanation. They proposed that the great amount of time that pre-service teachers spent as pupils in the classroom shapes their beliefs, which remain latent during formal training in pedagogy at the university. Afterwards, their formed beliefs become major forces when they become in-service teachers in their own classrooms.

Based on Jackson (1968), Clark and Peterson (1986) categorized teachers’ thought processes into three fundamental types: teacher planning, teachers’ interactive thoughts and decisions, and teachers’ theories and beliefs. Clark and Peterson’s work was regarded as paramount at the time (Fang, 1996). For the first time, the topic of teachers’ beliefs was formally included as a category in teacher education research. Apart from Clark and Peterson (1986), Munby (1982) also noted the lack of research on the concept of teachers’ theories and beliefs. While the studies on the topic were still few, “there was nonetheless sufficient work for it to constitute a distinct category of inquiry in the field of teacher education” (Borg, 2006, p. 17).

Clark and Peterson (1986) paved the way for following scholars to explore the field of teachers’ beliefs a step further. Towards defining the teachers’ beliefs, Pajares (1992) deconstructed the notion into a variety of foci that deserved scholars’ attention for research and examination. He stated that “little will have been accomplished if research
into educational beliefs fails to provide insights into the relationship between beliefs, on the one hand, and teacher practices, teacher knowledge, and student outcomes on the other” (p. 327).

Empirical studies on language teachers’ beliefs began to emerge during the 1980s and 1990s. The most significant contribution took place in the field of reading/literacy education (Fang, 1996). Harste and Burke (1977) defined reading teachers’ theoretical orientations as their belief systems, which may have led teachers to monitor their students’ behaviors and help them make classroom decisions. Reading research also examined how teachers’ theoretical orientations affect their ways of perceiving English reading, namely, whether English reading is a bottom-up, top-down, interactive or transactional process (Kinzer, 1988; Kinzer & Carrick, 1986; Leu & Kinzer, 1987; Michell, 1991). In addition, Mango and Allen (1986) found that, in terms of teachers’ different beliefs about writing, teachers conduct different language arts instruction. Wing (1989) stated that early childhood teachers’ theoretical beliefs influence their ways of teaching, and then in turn shape their students’ perceptions of reading and writing. Wing’s findings are consistent with Kamil and Pearson’s (1979) research, which proposed that teachers’ theoretical beliefs not only affect classroom instruction, but also exert an impact on students’ perceptions of literacy processes.

While it was a good starting point for studies on language teachers’ beliefs, research on the topic was still flawed in some ways. For one thing, researchers narrowed the definition of teachers’ beliefs, aligning them only with theoretical orientations. For another, a majority of studies presupposed that there was a unidirectional relationship
between language teachers’ beliefs and their practices, and what researchers did was simply test for and confirm the relationship.

Paradigm Shifts on Teachers’ Beliefs and Practices

Research paradigms are defined as whole systems of thinking (Neuman, 2011) that indicate the established research traditions in a particular discipline. Early academic research stems from positivism, in which researchers believe that no knowledge can be properly inferred or deducted unless it is evidence-based (Markie, 2004). Positivism holds that there is an objective world from which we can gather data and test it through empirical design. Then in the early 1900s, some researchers began to reject positivism and embraced a qualitative research paradigm, attempting to make qualitative research as rigid as quantitative research. The 1970s and 1980s witnessed the emergence of post-positivism; the increasing ubiquity of computers aided in qualitative analysis and a number of qualitative journals came onto the stage. In the late 1980s, researchers swarmed to study the topic of identity, including issues of race, class, and gender, which in turn lead to a reflexive approach. However, researchers in the above paradigms are passive observers, whose theories have been rejected through the 1990s, thus making qualitative research more participatory and activist-oriented. The 1990s were also a time when researchers began to develop and adopt mixed-methods approaches, having determined that a hybrid of qualitative and quantitative methods would be possible. However, while research paradigms changed as time went by, the shift was not apolitical. External factors, for example, a country’s ideology, still guide what can count as publishable research in scholarship (Meyer & Benavot, 2013).
The continuum of research paradigms from positivism (quantitative method-based) to pragmatism (mixed-methods-based), with other paradigms such as constructivism and critical theory (qualitative and/or quantitative method-based) in between, has oriented EFL researchers from simply focusing on inconsistency/consistency of teachers’ beliefs and practices to examining the sociocultural and political factors influencing teachers’ beliefs and practices.

**Positivism Paradigm: Debate on Consistency vs. Inconsistency**

The period of 1990 through 2000 was a time of change in studying teachers’ cognition in language education (Borg, 2003). In terms of the relationship between teachers’ beliefs and teaching practices, two competing themes recurred in relevant literature during this time. One theme proposed that a consistent relationship exists between teachers’ beliefs and practices; the other, however, stated that the connection between teachers’ beliefs and instruction is inconsistent.

Numerous reading studies support the notion that teachers’ theoretical beliefs shape their ways of teaching. Rupley and Logan (1984) found that elementary teachers’ perceptions of reading affect their decision-making in the classroom. Richardson and his colleagues (1991) reported that teachers’ beliefs about reading are consistent with their classroom teaching practices. They further explained that teachers who are in favor of skills-based instruction draw heavily on basal texts, and prefer decontextualized modes of assessment, such as the ubiquitous blackline master. In contrast, teachers who believe in constructivism regard the whole-language approach as the best practice for promoting more forward-thinking teacher education programs (Anders et al., 2000; Au, 2000;
Lenski et al., 1998; Pressley, 2006; Pressley & Harris, 1997). The distinction between these two opposing views of reading instruction resulted from the heavy emphasis on either behaviorism or constructivism. The latter tenet places emphasis on the process of learning, which has more value than the final product. Teachers in this constructivism paradigm serve as students’ facilitators instead of instructors, allowing their curious students to stop to reflect on their learning. In contrast, teachers in the behaviorism paradigm fasten their students in seats on the bus and drive them directly to their final destination with a single-minded determination.

Similar to the studies on teachers’ beliefs in general and on English reading, some research in ESL/EFL education focused on the relationship between language teachers’ perceptions of their content knowledge and their actual teaching practices. Johnson (1992) researched certain ESL teachers’ theoretical foundations in their reading classrooms, and found that they aligned their actual teaching with their lesson plans. Johnson used a multidimensional TESL (teaching English as a second language) theoretical orientation profile, which consisted of an ideal instructional protocol, a lesson plan analysis task, and a beliefs inventory. She recruited as subjects 30 ESL teachers who had different theoretical orientations on second language learning and teaching, and studied their corresponding instructional practices represented by skill-based, rule-based, and function-based methodologies. Her findings indicated that those teachers who hold clearly defined theoretical beliefs consistently lean towards one particular methodological approach. In her further study, Johnson (1994) concluded that while teachers’ beliefs are difficult to define and study due to their invisibleness, educational research on teachers’ beliefs share
three basic assumptions: “1) teacher beliefs influence their perceptions and judgment, 2) teacher beliefs plays a part in shaping information on teaching into classroom practices, and 3) understanding teacher beliefs may improve teacher practices and teacher education programs” (p. 439).

However, some research showed limited correspondence between teachers’ beliefs and practices. Richardson and colleagues (1991) hypothesized that the inconsistency may be due to research methods; for example, researchers may attempt to assess teachers’ beliefs through the means of paper and pencil or questionnaires. Research scholars after the 2000s further proved this hypothesis. Basturkmen (2012) concluded that even “sophisticated methods do not necessarily reveal closer correspondence” (p. 283). In a study based on multiple sources of data on beliefs and practice, van der Schaff and some researchers (2008) also found there was no clear correspondence between teachers’ stated beliefs about research skills and their actual practices of teaching these skills in their research classrooms. Farrell and Lim (2005) reported a “strong sense of convergence between the stated beliefs and actual classroom practices of grammar teaching of one of the two experienced teachers in their study”; however, the beliefs of the second teacher only “partially matched some of her actual classroom practices” (p. 9). Powers and Butler (2006) examined four teachers’ beliefs and practices in literacy and literacy assessment over the course of one year. Four teachers worked in the university literacy clinic as part of their graduate coursework. Two of the four taught elementary pupils in a public school, one worked as a reading resource educator at a public elementary school, and the last one taught high school students at an
alternative school affiliated with a public school. Powers and Butler found that teachers’ beliefs and their classroom instruction were often inconsistent due to an array of variables such as school philosophy, and/or government and state mandates.

**Constructivism Paradigm: Factors Triggering the Inconsistency**

After the dominant positivism paradigm in the 1980s, researchers in the 1990s began to explore the factors that caused these inconsistencies between teachers’ beliefs and practices from a constructivist perspective. Some researchers explained the inconsistency between teachers’ beliefs and practices from a methodological perspective, and some others held that sociocultural factors also can account for the inconsistency.

**Methodological issues in explaining the inconsistency.** Fang (1996) did a comprehensive study on teachers’ beliefs and practices, which can be regarded as a synopsis of the studies from the 1980s and 1990s. Apart from analyzing the literature on the consistency and inconsistency between teachers’ beliefs and practices, he contributed greatly by summarizing the most commonly used methods for eliciting responses on teacher cognition. He described and analyzed three types of methods: policy capturing, repertory grid technique, and process tracing.

Fang (1996) defined policy capturing as a method using simulated cases or vignettes from students, curriculum materials, or teaching episodes to study teachers’ classroom judgments. Specifically, given the features or cues in the materials, teachers are asked to make judgments about the features. Then, data are recorded on a Likert scale, and processed with linear regression equations. The equation is interpreted as “a model of the teacher’s policy about the features from which judgments are given” (p. 56).
Armour-Thomas (1989) pointed out that the major problem of this method is its reliance on consistently generalizing from a small sample to a big population. Armour-Thomas also indicated other problems with the policy capturing method. For example, regression equation might only predict key variables that affect teachers’ judgment but cannot precisely describe teachers’ decision-making. Borg and Gall (1989) then listed possible errors in teacher judgments, which may include observer/experimenter drift, halo-effect, error of leniency, personal bias, reliability decay, contamination, and error of central tendency. Take the observer/experimenter drift for example: a teacher might not understand what kinds of improvement he/she needs to make in his/her actual practice as a teacher, until he/she has the chance to observe his/her peers teaching. Other scholars also pointed out problems with the policy capturing method (Lave, 1989; Webb & Burstein, 1986). Most policy capturing studies were conducted in laboratory settings rather than in an authentic classroom setting, which is highly dynamic and interactive. Results derived in laboratory settings may not accurately reveal the features of an authentic classroom.

Another method in which to solicit teachers’ beliefs is the repertory grid technique (Johnson, 1992; Kinzer, 1988; Wilson et al., 1993). According to Fang (1996), this method is used to “discover the personal constructs that influence individual behavior.” To be specific, a teacher is asked to select the statement among a set of statements which best reflects his/her teaching beliefs. Investigators label the categorical responses from teachers with “constructs,” which are then formed in a grid format (Clark & Peterson, 1986). Similar to the policy capturing method, data collected from the
repertory grid technique are also unreliable to be generalized to all settings. What the data represents is only hypothetical situations.

The last method used to elicit teachers’ beliefs in Fang’s (1996) study is process tracing. Fang regarded process tracing as an overarching term under which lies a group of verbal report methods used by teachers to make their classroom decisions. Four common methods are think-aloud, retrospective interview, simulated recall, and journal keeping. The think-aloud approach requires teachers to verbalize their thoughts in their actual teaching. The retrospective interview usually asks teachers to reflect upon their teaching after the class has ended, or at any moment after an instructional task is performed. The simulated recall elicits teachers’ reflection on their classroom instruction as a way of “replaying” their actual performance. The journal-keeping approach asks teachers to record their teaching practices in written form instead of verbalizing them.

Scholars hardly ever reach a consensus on the validity of the data generated from a process tracing approach. Some hold that the introspective nature of the process tracing method makes scholars doubt its validity in scientific research. Nisbett and Wilson (1977) criticized the use of verbalized reports as valid data and contended that self-reported data may be based on “a priori” and implicit casual theories. However, other scholars acknowledged the validity of a process tracing approach and contended that:

the inference that the recall of one’s own private, conscious thoughts approximates the recall of the overt, observable events has led to the anticipation that the accuracy of the recall of conscious thought is high enough for most
studies … if the interview is made within a short time after the event (Bloom, 1953, p. 162).

While studies on teachers’ beliefs and practice in the 1980s to 1990s began to change from a one-dimensional orientation to a bi-dimensional one, scholars in the 1990s still regarded the literature, at this time, as in its infancy (Bean & Zulich, 1992). Fang (1996) proposed an expanded direction for future research. First, for those scholars who believe in consistency between teachers’ beliefs and practices, they should further explore how the teachers’ theoretical beliefs inform their teaching practices. Secondly, most studies at this time only focused on the K-12 level, with few focusing on the college level. Third, for ESL/EFL teachers, studies on the connection between teachers’ beliefs and components of their content knowledge are necessary. For example, a reading teacher’s beliefs can be further observed through the lens of their connection with vocabulary or grammar in a reading text. Finally, yet importantly, research should be done to gain insights from successful in-service teachers and apply them to the pre-service teachers.

**Sociocultural factors mediating teachers’ beliefs and practices.** With Vygotsky’s sociocultural theory prevailing in the contemporary academic literature, research scholars, particularly in the field of language education, begin to investigate teachers’ beliefs and practices through a sociocultural perspective, which indicates that educational beliefs are not context-free (Fang, 1996; Pajares, 1992).

Hence, there are numerous studies revealing that sociocultural factors cause the mismatch between teachers’ beliefs and practices (Ajzen, 2002). Nespor (1987) explained
how context plays a role in shaping teachers’ beliefs and thus informing their practices: “the contexts and environments within which teachers work, and many of the problems they encounter, are ill-defined and deeply entangled … beliefs are peculiarly suited for making sense of such contexts” (p. 324). Ernest (1988) summarized two major forces that restrict teachers to align their beliefs with their actual practices: the influence from the social context and the institutionalized curriculum. All these sociocultural or contextual factors are intertwined to influence teachers’ beliefs and practices.

**Transformativism Paradigm: Teacher Identity and the Critical Pedagogy**

Transformativism is among the new paradigms emerging in the new century. Transformativism, which is situated in the critical theory, leads teacher education in new directions. It allows educators not only to focus on underrepresented teachers’ identities but also to examine teachers’ practices from the perspective of social justice and democracy.

Therefore, *positioning* becomes a concept related to beliefs. The positioning theory sheds light on research into the interface of beliefs and identity. According to De Costa (2011, p. 350), positioning refers to how learners or teachers position themselves and others in terms of the identity they want to construct in a conversation. The positioning theory allows teachers “to examine how learners’ discursive positionings shape their beliefs, and subsequently influence their learning outcomes” (p. 350). That is, how a person identifies himself or herself, together with how he or she is identified and positioned affects his/her learning outcomes. For example, Hawkins (2005) examined how two kindergarten ESL learners positioned themselves, and how the way they were
positioned in their learning—together with power relations indicated in the learning journey—impacted their learning outcomes.

Based on the positioning and discourse theories, Trent (2012) explored the discursive positioning of native-speaking English teachers (NETs) in Hong Kong. He studied eight NETs, using semi-structured interviews, to gain in-depth data of NETs’ experiences in Hong Kong schools. He elicited responses from the eight subjects on three aspects: self-positioning (how a person identifies his/her position in a specific setting, e.g., in a conversation or a school setting), being positioned (how a person is identified by others in a specific setting), and responding to positioning (how a person responds to identities others imposed on them). Trent found that these NETs perceived challenges to their self-positioning as professional language teachers from some local teachers who doubted the value of their teaching in the classrooms.

Another major force, the critical pedagogy, which represents the transformative and advocacy paradigm, also influences the studies on teachers’ beliefs and practices to a large extent. The critical pedagogy of Freire (1970) focuses on social change and transformation of the individual. Freire seeks to liberate individuals through a dialogic problem-posing pedagogical style that challenges learners to become aware of the oppressive social structures in the world, to understand how these structures have influenced their own thought, and to recognize their own power to change their own world (Freire, 1970).

Problem-posing processes and Freire’s critical thinking strategies have been developed across many educational contexts, especially for the EFL context (Merriam,
The critical pedagogy changes EFL teachers’ original mindset that instruction is only situated in the classroom context, but instead helps teachers raise interactions with their students to a higher level, i.e., a community that embraces democracy and social justice. Dowdy and Cushner (2014) collected a group of teacher practitioners’ classroom designs with an emphasis on social justice to the field of literacy education, among which there are many EFL researchers.

**Pragmatism Paradigm: Beliefs as a Complex System**

Pragmatism (Dewey, 1929; James, 1907; Peirce, 1995) is an action-oriented philosophy of science that reveals the link between action and truth, or practice and theory. Dewey (1933) defines pragmatism as ‘the doctrine that reality possesses practical character’ (p. 31). Pragmatism focuses on the real-world problems that are complicated to solve from just a single paradigm. Pragmatism does not require researchers to generate a universal solution to a single problem, but instead leads them to identify and analyze the actual situations in which all factors are interconnected to make the complex picture. The pragmatism paradigm is also indicated in the studies on EFL teachers’ beliefs and practices when researchers attempt to identify teachers’ beliefs as a complex system.

Barcelos and Kalaja (2011) stated that, “The studies tend to view beliefs as variable and fixed, and focus on changes on these, and/or on the interaction between beliefs and learner or teacher actions, acknowledging their relationship to be a complex one” (p. 281). Therefore, studies on language teachers’ beliefs in the recent two decades tend to focus on the two following aspects: beliefs as a complex system, and the connections between beliefs and change or actions.
How beliefs interact with actions has been a recurring theme in scholarly research for decades. Earlier research on beliefs viewed this relationship as a unidirectional, cause-and-effect relationship; as interactive and mutual, namely, beliefs influence actions and vice versa; or, as complex, that is, beliefs and practices may be irrelevant due to contextual factors (Barcelos, 2006). Rather than studying effects of teachers’ beliefs on practices, researchers at the new era began to investigate the role of actions in beliefs change from a sociocultural perspective. Most research through the lens of a sociocultural approach regarded beliefs as mediators of learner/teacher actions (Navarro & Thornton, 2011), and reflection on their actions helps them define their emergent beliefs. Generally, research on language teachers’ beliefs and practices in a sociocultural approach can be categorized as follows: a) belief as mediator and b) belief change.

Belief as a mediator. Alanen (2003) argued that “further research is needed to investigate how beliefs are put to practice during language learning” (p. 68). To bridge the gap, Negueruela-Azarola (2011) investigated how “semiogenesis” — an approach referring to “documenting the emergence of meaning as signs with functional capabilities in concrete activity” — informs the internalization of beliefs as conceptualizing activity, “the origin and result of developmental processes in the L2 classroom” (p. 363). Eight in-service language teachers were recruited in the study and given a seminar on sociocultural approach in L2 teaching. A series of textbooks, articles, and book chapters on L2 teaching were selected, and assigned to the participants to elicit their discussion and reflection. In the study, Negueruela-Azarola viewed a sociocultural framework as a
“complementary path to exploring beliefs as contextually situated social meaning emerging in specific sense-making activities” (p. 368).

Similar to Negueruela-Azarola, other scholars have used the sociocultural framework to investigate beliefs (Yang & Kim, 2011; Peng, 2011; De Costa, 2011). These papers report on how beliefs act as mediators in cognition, in change, and in the macro-political context (Barcelos & Kalaja, 2011).

Belief change. There are also some recent studies focusing on belief change (Navarro & Thornton, 2011; Aragão, 2011; Mercer, 2011; Borg, 2011; Woods & Cakir, 2011). Mercer (2011) noted that beliefs are complex and nuanced and may change to “reflect contextual changes.”

Reflection plays an important role in belief change. Woods and Cakir (2011) stated that, “when a teacher reflects on practice, and begins to articulate his or her “practical” knowledge, it begins to be theorized and to inform his or her theoretical knowledge” (p. 389). By acknowledging the changeable attributes of teacher beliefs, Woods and Cakir (2011) argued that the teachers’ knowledge and beliefs in communicative language teaching is “multi-dimensional” and “dynamic.” They developed a framework with two dimensions: “personal-impersonal” and “theoretical-practical” (p. 381). Then, they investigated six Turkish English teachers and found that when those teachers discussed the characteristics of communicative teaching, depending on their own experiences and stories, they referred to theoretical frameworks learned at school. It turns out that they relied on their personal/practical beliefs more than impersonal/theoretical beliefs.
Borg (2011) investigated how teacher education courses affect in-service teachers’ beliefs and concluded that these education courses do have an impact. These education courses can extend teachers’ beliefs and make their beliefs more explicit. They also help teachers to articulate their beliefs and put them into practice, thus connecting their beliefs with theory, and they can ultimately pave the way for teachers to form new beliefs. Borg further suggested in his study that educational courses “could have engaged teachers in a more productive and sustained examination of their beliefs” (p. 370).

Besides the studies on teachers’ beliefs from a sociocultural perspective, research regarding how teachers perceive reading shapes their ways of teaching reading remains prevalent after the 2000s (Arnett & Turnbull, 2008; Borg, 2011; Isikoglu et al., 2009). Other scholars (Sato & Kleinsasser, 2004; Breen et al., 2001) even found that the relationship between language teachers’ beliefs and practices is interactive, namely that, “beliefs drive actions, but experiences and reflection on actions can lead to changes in, or additions, to beliefs themselves” (Basturkmen, 2012, p. 283).

Fung and Chow (2002) indicated that there was limited correspondence between the novice teachers’ theoretical orientations and their practices during a language teaching practicum. Basturkmen and others (2004) investigated the relationship between foreign language teachers’ beliefs and practices in terms of “focus on form,” which are the instances of the behavioristic orientation during communicative lessons. They concluded that, among the three teachers, there was a “tenuous relationship” (p. 243) between the teachers’ actual practices and stated beliefs.
Theoretical Paradigm Selected for the Present Study

While the topic of teacher’s beliefs has been studied for decades, there is still more room for exploration in this field. First, studies on language teachers’ beliefs and their practices in teaching specific language knowledge are unevenly distributed, with the majority of the studies focusing on grammar teaching (Andrew, 1997; 1999; Basturkmen et al., 2004; Borg, 1998a; 1998b; 1999a; 1999b; 2001; Burgess & Etherington, 2002; Farrell, 1999; 2005). There are surprisingly fewer studies on language teachers’ beliefs and practices on other specific aspects of language teaching such as speaking, listening, writing, vocabulary, and even comprehension. Even within the larger portion of studies on grammar and reading, the correlation between teachers’ beliefs and their classroom actions still needs to be investigated further due to newly emergent and interdisciplinary theories.

Second, with an increasing number of paradigms emerging to influence the studies on teachers’ beliefs and practices, researchers should address the topic from multiple, instead of single, paradigms. This is also true in terms of research methods. Using multiple methods can better refine the design than a single method. For example, instead of belief inventory and case studies, more reflection and interpretative approaches can be used to examine the issues in the field of teachers’ beliefs and practices.

Therefore, the present study was conducted through the lens of pragmatism, which is not committed to any specific philosophy or reality, but instead to the complexity of real-world problems (Cherryholmes, 1992; Murphy, 1990). Scholars and researchers using the pragmatism paradigm acknowledge the existence of divergences,
inconsistencies, and barriers in social, historical, political, and other contexts. Over recent decades, scholars in this paradigm have used a mixed-methods approach to collect both quantitative and qualitative data that best answer their research questions. LeCompte and Schensul (1999) used both quantitative and qualitative data collection in their ethnographic study; current researchers (e.g., Luck, Jackson & Usher, 2006; Yin, 2003) frequently use both quantitative and qualitative data in their case studies. Therefore, the present study, designed in a mixed-methods approach, best fits the pragmatism paradigm by combining positivism (quantitative approach) and socio-constructivism (qualitative approach). First, a positivism paradigm is used to test the in/consistency between the Chinese EFL teachers’ beliefs and practices. Then, a sociocultural perspective is adopted to go through the factors that can inform the results from the quantitative design. Surveys, classroom observations, and interviews are sequentially used for data collection and analysis in the study.

**Summary**

In this chapter, I reviewed the literature on the topic of teachers’ beliefs and practices, particularly in the ESL/EFL context. After introducing various definitions of teachers’ beliefs and summarizing their features, I analyzed the studies in an emerging stage when researchers had attained consensus on a unidirectional relationship between teachers’ behaviors and student achievements. I then presented a synopsis on the literature at the developing stage when scholars held two competing themes: consistency and inconsistency on teachers’ beliefs and practices. I summarized the studies after the 2000s, when researchers attempted to explore language teachers’ beliefs and practices
from a sociocultural perspective and regarded the relationship between teachers’ beliefs and actual teaching as interactive and complex. I concluded the chapter with some issues that the current study intends to address and those that scholars and researchers can focus on in the future.
CHAPTER III
RESEARCH METHODOLOGY

Overview of the Chapter

In this chapter, I first present research context and sites, and give my rationale for choosing an exploratory sequential design. I then explain how the exploratory sequential design fits my study design and guides the stages in the study.

Next, I describe the specific components in both quantitative and qualitative parts. In the quantitative part, I describe sample size and sampling process, together with data collection, coding, and analysis. Particularly in the data coding part, I introduce a specific methodological technique, quantitizing, which was used to explain qualitative data from a quantitative perspective. The technique was used in the study as a good fit to explain the collected open-ended question responses (which were qualitative in nature) in a statistical, quantitative way.

In the qualitative section, I describe my purposive participants and explain why a case study was chosen to present my qualitative findings. I then describe how I collected, transcribed, and analyzed the data. I also explain how as a researcher I ensured the trustworthiness and ethics for the study.

Research Context and Sites

The study was conducted in China, in a coastal city in the Northeast. China’s majority ethnic group is the Han people; there are 55 recognized minority ethnic groups. While the Northeast region has many ethnic minorities, the majority of the
population is Han Chinese and have ancestors who migrated in the 19th and 20th centuries from Central China. As one of the earliest industrial regions in China after the founding of People’s Republic of China in 1949, the Northeast continues to be a major industrial base.

In China, English has been a primary subject for decades, due to both national and personal factors (Hu, 2002). At the national level, China uses English to develop its international communications and conduct its world business (Cortazzi & Jin, 1996); at the personal level, students in China regard English as a medium to help them go abroad and/or form joint ventures to create better opportunities in their academic or career paths (Ng & Tang, 1997). Due to the great importance of English as a subject, educators in China have been striving to design and develop English curricula since China opened its doors to the Western world in 1978. While English is the most learned and spoken foreign language, it is not officially recognized as the second language of China. As it is still recognized as a foreign language, English education in China is formally termed EFL education. Generally, before entering university, students in China have studied English for at least six years: from middle school through high school. English is one of the core subjects in the entrance exam to college/university (Gaokao), which is the standardized placement test in China.

The study location in Northeastern China is adjacent to North Korea, South Korea, and Japan. This city with diverse cultures hosts thousands of international students and visitors from all over the world, the majority of whom speak English.
The three universities selected for the present study were all research and teaching universities in China that offer both undergraduate and graduate programs requiring students to take English for at least one year, or two semesters (see Figure 2).

*Figure 2.* Research sites in a coastal city in Northeast China (in red star)

One of the universities, with approximately 30,000 students and the longest history among the three universities, covers an area of 1.13 million square meters. As it is renowned for its maritime majors and specialties, it has a training dock and over 40 laboratories for teaching, training, and research. It is also one of the World Maritime Academy branches.

Another university in the study had over 20,000 students at the time of the study, with approximately 700 postgraduates, 10,000 undergraduates, 900 international students, and nearly 10,000 students in continuing education programs. The university is renowned for its foreign language programs.
The final university in the study includes 15 schools or departments, 50 undergraduate specialties, and 2 international partnership programs. It offers 3 first-class doctorate programs and 14 first-class master’s programs. The university is one of the national light-industry universities.

**Rationale of the Exploratory Sequential Design**

This study adopted an exploratory sequential design based on mixed-methods design classifications (Creswell, Plano Clark, Guttman, & Hanson, 2003). When choosing the research method, I focused on whether the design fit my research questions. Choosing an appropriate mixed-methods design requires the consideration of three issues: priority, implementation, and integration (Creswell et al., 2003). *Priority* refers to what specific approach—the quantitative or the qualitative—is given more emphasis. *Priority* is closely connected with the types of research questions—whether researchers want to investigate “what” and “how” in qualitative studies or “if” in quantitative studies. Then, *implementation* determines the sequence of data collection, i.e., whether the quantitative and qualitative data collection and analysis come in sequence or in parallel. *Integration* occurs when researchers strive to mix or connect the data after the data collection in the research process.

The present study is an exploratory sequential design, in that it does show exploratory and sequential features in addressing these issues. For the exploratory feature, the primary purpose (*priority*) of the study is to explore the relationships, either consistent or inconsistent, between beliefs and practices. As for the sequential feature (*implementation*), it is a multilayered study with qualitative data collected and analyzed
first, and then quantified in numeric codes (integration). While the discussion of the study is centered around the possible constraints that caused inconsistencies between beliefs and practices, the exploration of the inconsistencies was the priority. The use of quantitative data in the study was consistent with the sequential exploratory design, in which the quantitative component assists in the interpretation of qualitative findings (Creswell et al., 2003).

**Stages in the Exploratory Sequential Mixed-Methods Design**

The purpose of the study determines the research design and then determines the stages of the study. Therefore, the primary purpose of the study—to explore the two relationships—leads to two major stages for the study. Morse (1994) diagrammed the exploratory sequential approach as QUAL → quan, which is also the basic diagram for the current study. However, data collection and analysis process in the study included two sub-diagrams/stages. The first diagram was qual → QUAN, with qualitative data being analyzed in a quantitative way, which is termed quantitizing. The second diagram was QUAL → quan, with the qualitative description data used to evaluate the in/consistency between beliefs and practices in specific cases. The following chart describes how the design was structured for the entire study (see Figure 3).

The purpose of the first stage was to explore the first relationship, i.e., the relationship between beliefs about reading and beliefs about teaching reading among the teachers in the study. All the data were collected from the open-ended question surveys, which presented the teachers’ responses in a qualitative form. Then, the qualitative data
were quantitized in a numeric, quantitative form to confirm or evaluate the relationship. That is the qual \rightarrow \text{QUAN} stage.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{flowchart.png}
\caption{Flowchart of the exploratory sequential mixed-methods design}
\end{figure}

Then, the second stage was to explore the relationship between stated beliefs and actual practices. However, instead of including all the subjects from stage one, the second stage only included seven purposive participants. Qualitative description through the transcription of classroom observations was generated in this stage. Then, the data of the seven participants were compared with their quantitative data in the first stage. That is the stage of \text{QUAL} \rightarrow \text{quan}.

The whole process of the study thus includes two major stages in sequence: the first stage aimed at exploring the relationship between two sorts of beliefs, and the second stage evaluated the relationship between beliefs and practices. While the second
stage’s main purpose was to explore the relationship, it also yielded data to explain the inconsistencies among the different constructs studied.

**Part I: Quantitative Design**

Subjects in the study included 96 university EFL teachers who were faculty members from three different universities in a city in Northeastern China. An established rapport and initial contact with deans and professors at the selected universities helped me identify the potential participants.

**Sampling Method and Size**

The number of potential subjects identified was 124; due to some invalid survey answers certain participants’ data were not included. A sample size should be neither too large nor too small, for sake of research cost, manageability, and generality (Creswell, 2012). The final sample size (96), was determined by three primary factors: the expense of data collection, the manageability of the study, and the degree of statistical accuracy (e.g., confidence interval). To be more specific, the expense of data collection refers to my ability as a researcher to fund this study and make it valid and reliable. Due to factors that included international transportation and accommodation (e.g., the research venue was in China, while I was studying in the United States) and the expense of data collection and analysis (e.g., in some cases, I had to use external rewards as incentives to get enough survey participants; I had to pay for data transcriptions), I had to keep the study affordable. The manageability of the study refers to how the study can be conducted within a workable and efficient timeline. In short, I had to choose a number of participants that could be accessed within a certain schedule and budget. Therefore,
participants in the study were selected in a nonrandom and purposeful method, which is particularly fit for qualitative studies (Merriam, 1998; Yin, 2003).

The 96 teachers in the sample have different lengths of working experience, ranging from 2 to 30 years. Teachers of different genders, ages, and races were randomly enrolled. They were categorized as teaching either English-major students (E) or non-English-major students (N) (See Table 1.) As the study was a two-stage design, all participants were given the survey to fill in at the beginning of the study, then those who were willing to be participants came to the second stage of the study.

Table 1

*Biographical Information of the Sample*

<table>
<thead>
<tr>
<th>UNVS</th>
<th>NUMBER</th>
<th>MAJOR TAUGHT</th>
<th>GENDER</th>
<th>PURP. PARTICIPANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N/E</td>
<td>F/M</td>
<td>F/M</td>
</tr>
<tr>
<td>1</td>
<td>55</td>
<td>55/0</td>
<td>43/12</td>
<td>5/2</td>
</tr>
<tr>
<td>2</td>
<td>18</td>
<td>5/13</td>
<td>3/15</td>
<td>N.A.</td>
</tr>
<tr>
<td>3</td>
<td>23</td>
<td>0/23</td>
<td>17/6</td>
<td>N.A.</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>60/36</td>
<td>63/33</td>
<td>5/2</td>
</tr>
</tbody>
</table>

a. UNIVS: universities; PURP. PARTICIPANTS: purposive participants,
b. N: non-English major; E: English major,
The biographical information of the sample is presented in Table 1. Among the 96 teachers who were given questionnaires to fill in, 55 were from the same university, and 18 and 23 were from the other two universities. Sixty of the total 96 teachers were teaching students majoring in English (E), whereas the other 36 were teaching non-English-major (N) students. The gender ratio was approximately 2:1, with the female teachers in the majority. Twenty-five of the 96 teachers who filled in the BRI surveys were willing to participate in the second part of the study, i.e., the qualitative research.

Ultimately, seven participants, all from one of the three universities, were further selected for the qualitative part of the study. The seven participants were purposefully selected according to a few criteria, particularly teachers’ willingness to participate, their availability for classroom observation, and the manageability of the study. For example, while the research included 96 participants in the survey part, it was not practical for all 96 teachers to be observed for their actual practices. As the average time for a class observation ranges from 45 to 90 minutes, observations of all the 96 teachers would yield approximately 4,320 to 8,640 minutes of data. It would also have been impossible to gather the data in a reasonable amount of time; schedule coordination between the researcher, the teachers, and their universities would not allow for daily observation, so research would have extended perhaps beyond a single school year. In addition, the convention in qualitative studies is to focus on certain selected, purposeful participants and yield saturated descriptions of the participants’ life experience excerpts (Creswell, 2012). Different researchers in qualitative studies (e.g., Creswell, 2012; Morse, 1994) suggest 5 to 25 as the minimum fit number for participants. Based on the above-
mentioned factors and considerations, I finally chose seven participants for the qualitative part of the study.

**Data Collection**

In the quantitative part of the study, a survey of 10 open-ended questions, modified from the Burke Reading Interview (BRI), was used to solicit the participants’ beliefs about reading and teaching reading (see Appendix A). BRI was primarily developed to examine how a reader’s beliefs about readers and reading can affect the reading strategies s/he chooses from a metalinguistic perspective (Goodman, Watson & Burke, 2005).

**Open-ended questions from BRI.** My reasons for using BRI instead of other instruments were trifold: first, BRI is primarily a tool to solicit rich and flexible qualitative information from the participants. Compared to structured multiple-choice questions, BRI provides more flexibility and room to answer what participants truly believe and yields richer information than a typical structured survey. Second, studies using BRI found that teachers often relate what they believe about reading to the models of reading instruction they used in actual classrooms (Burke, 1980; Goodman, Waston, & Burke, 2005; Harste & Burke, 1977; Squires, 2001). Those studies provided me with insights that BRI might be a fit instrument for my study. Third, my rationale to choose BRI was also informed by my own experience of being given a BRI as an adult when I was taking one of my mentors’ doctoral courses. The questionnaire guided me to reflect on reading and teaching reading from an adult perspective, which was quite different from the perspective of a young student reader.
I aimed to use the ten open-ended questions in BRI to understand the relationship between teachers’ stated beliefs about reading and their stated beliefs about teaching reading. Five of the questions were used to solicit teachers’ beliefs about reading, and the other five questions were used to get their stated beliefs about teaching reading. The original BRI also consists of 10 questions, which were used for interview purposes. However, the purpose of the present study in using the BRI was not for interviewing, but for an open-ended question survey to be filled out electronically and returned over the course of three days (see Appendix A).

Adoption of open-ended questions for this study fits the research design, paradigms, and purposes. Interviewing is often used in qualitative studies, but surveys are used in quantitative or mixed-methods studies. I updated the questions from the research survey BRI and made them fit for a mixed-methods study. A mixed-methods paradigm focuses on real-world problems (pragmatism), whereas a qualitative paradigm focuses on individuals’ experiences (constructivism). What the present study does is identify the real-world problem, i.e., are teachers’ stated beliefs consistently indicated in their actual practices? If not, what might be the complex factors causing the inconsistency? Results from qualitative studies are not always generalizable, because they focus on specific individuals. That should not be the case in this study. Results of this study aim to be generalizable, at least to the Chinese EFL context in the selected region.

The validity of the survey instrument was ensured in two ways. First, as BRI has been widely used in numerous studies (e.g., Goodman, Watson, & Burke, 2005; Harste & Burke, 1977; Squires, 2001), its validity has already been confirmed in the literature.
Second, I member-checked its validity among a few professionals, including three of my colleagues in the same field, my doctoral advisor, and a professional statistician at a research bureau.

**Data Analysis**

In this section, I describe the coding process for the quantitative data in the study. Generally, it consisted of three stages. *Pre-coding* refers to the creation of a coding rubric based on an adapted version of the Theoretical Orientation for Reading Profile (TORP). *In-coding* indicates the primary process of coding, in which the technique of quantitizing was used. *Post-coding* refers to the statistical analysis stage via SPSS software; it involved examining the in/consistency between two types of stated beliefs: reading beliefs and teaching beliefs (see Figure 4).

**Figure 4. Coding Process in the Quantitative Design**

*Adapted TORP.* DeFord’s (1985) TORP was referenced to assess teachers’ beliefs and practices in this study, and particularly to design the coding rubric for data analysis. This survey consists of 28 items and used a five-point Likert scale to assess teachers’ agreement with statements about reading instruction. It aims to investigate three
Instructional orientations: (a) phonics, which emphasizes sound-letter units, with a gradual progression toward words and sentences, (b) skills, which focuses on development of sight words, and (c) whole language, which aims to get children immersed in meaningful and quality literature and working them down toward smaller language units.

Grading scores of TORP range from 28-140, with scores of 28-65 indicating a phonic orientation, 66-110 a skill orientation, and 111-140 a whole-language orientation. Scoring of each orientation is conceptually independent, but scores of the phonic orientation and skill orientation have been proved highly correlated and inversely correlated with scores of whole language orientation (Sacks & Mergendoller, 1997).

To assess TORP construct validity, DeFord (1985) compared 90 teachers’ TORP scores with their teaching as observed by experts. She reported a coefficient alpha reliability of .80, indicating “a moderately high level of internal consistency” (Ketner et al., 1997). In a further study by Mergendoller and Sacks (1994), a relatively higher test-retest reliability of .81 was found among 25 teachers.

TORP has been widely used in the fields of literacy education and counseling during the last two decades. It was used in the present study to guide the coding of the data, though not in soliciting the participants’ responses on beliefs and practices. To be more specific, the coding rubric in the current study draws only on the adapted TORP, with certain adaptations. Some items in TORP are not suitable for EFL learners or teachers, as it is originally designed for native English speakers. Refining the original
questions and themes generated in TORP to make them fit the current study was necessary.

Therefore, an instrument with TORP features designed for EFL teachers is a critical need identified by this study. Kinzer (1988) and Johnson (1992) both conducted similar research on EFL teachers. Kinzer (1988) divided beliefs into two broad categories: one indicating how the reading process takes place, and one noting how the reading process develops. The former category includes more theoretical beliefs about the reading process, and the latter entails more instructional practice. However, he further mentioned “these should not be dichotomized, since instructional decision-making may well be based on a synergistic relationship between the two, that is, on a conception of the reading process as well as on a conception of how the process develops” (p. 360). Kinzer further categorized the three ways reading takes place into text-based, reader-based, and interactive reading. Similarly, three explanations indicating how reading develops were mastery of specific skills, holistic language, and differential acquisition.

Based on Kinzer (1988), Johnson (1992) used a multi-dimensional TESL theoretical orientation protocol to conduct a study in the same field. The protocol also included two triads of categories in both reading and reading teaching beliefs. The categories are skill-based, rule-based, and function-based, which resemble Kinzer’s triads. While the terms representing categories are different, they actually indicate the same theoretical orientations (see Table 2).
Table 2

*Categorical Variable Sets in the Previous Studies*

<table>
<thead>
<tr>
<th></th>
<th>Behaviorism</th>
<th>Cognitivism</th>
<th>Constructivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>DeFord, 1978</td>
<td>Phonics</td>
<td>Skill-based</td>
<td>Whole language</td>
</tr>
<tr>
<td>Kinzer, 1988</td>
<td>Text-based</td>
<td>Reader-based</td>
<td>Interactive</td>
</tr>
<tr>
<td>Johnson, 1992</td>
<td>Skill-based</td>
<td>Rule-based</td>
<td>Function-based</td>
</tr>
</tbody>
</table>

It should be mentioned that the term “skill-based” appears in two different orientations, but with different meanings. For Johnson (1992), the term indicates reading as a separate language skill as compared with writing, listening, and speaking. In a behavioristic sense, skill-based means language learners use their reading skills to recognize words or textual patterns. However, the term in the cognitivist domain, as DeFord (1978) used it, indicates readers use reading as a skill to comprehend or process information in the text.

**Categorical variables.** Categorical variables, as the name implies, are defined as variables that consist of a set of categories (Creswell, 2012). Generally, there are three major types of categorical variables: nominal, ordinal, and interval. Nominal variables have categories with no natural order to them, which are different from ordinal variables that are in a natural order. Interval variables are created from intervals on a continuous scale. Based on the previous studies, the present study set up a set of categorical, nominal variables (see Table 3).
Table 3

*Categorical Variable Sets in the Study*

<table>
<thead>
<tr>
<th>Variable Set 1</th>
<th>Reading Survey</th>
<th>Teaching Survey</th>
<th>Adapted TOMP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Text-based - 1</strong></td>
<td></td>
<td><strong>Rote teaching-based - 1</strong></td>
<td><strong>Behaviorism - 1</strong></td>
</tr>
<tr>
<td>Variable Set 2</td>
<td><strong>Meaning-based - 2</strong></td>
<td><strong>Comprehension-based -2</strong></td>
<td><strong>Cognitivism - 2</strong></td>
</tr>
<tr>
<td>Variable Set 3</td>
<td><strong>Function-based -3</strong></td>
<td><strong>Interactive - 3</strong></td>
<td><strong>Constructivism - 3</strong></td>
</tr>
</tbody>
</table>

In total, nine categorical nominal variables within three sets were defined in this study. Set 1 consists of three variables on teachers’ beliefs of English reading models: text-based, comprehension-based, and interactive approaches. Set 2 consists of three variables on teachers’ beliefs of English reading teaching approaches: rote teaching-based, comprehension-based, and interactive approaches. Set 3 is three categorical variables representing teachers’ theoretical orientations indicated in the adapted TOMP: behaviorism, cognitivism, and constructivism. The researcher named each variable in each set with a number, for the sake of quantitative analysis. For example, the phonics model in Set 1 is marked as 1, comprehension-based teaching is marked as 2 in Set 2, and constructivism theory is marked as 3 in Set 3.

**Coding rubric for open-ended surveys.** A detailed coding rubric for the open-ended question items was designed for this study. As mentioned above, the coding rubric
was based on the adapted TORP. I invited another two researchers to code the data according to the rubric to test for inter-rater reliability. An example excerpt of the coding rubric is as follows (see Table 4):

Table 4

*Coding Samples for Teacher Survey Response*

<table>
<thead>
<tr>
<th>Question: What is English reading?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample 1</strong></td>
</tr>
<tr>
<td><strong>Teacher Response:</strong> “English reading is that you learn <em>some useful words, a few phrases</em> when you read. That is the surface level. You then <em>learn some culture</em> by reading; that is the deeper level. English words or vocabulary is important, but learning a culture is also important.”</td>
</tr>
<tr>
<td><strong>Annotation:</strong> This response is Code 1. While the teacher interpreted reading from two levels, he regarded English reading as something you learn from print, regardless of specific words or abstract concept like culture.</td>
</tr>
</tbody>
</table>

| **Sample 2**                     |
| **Teacher Response:** “It (English reading) is kind of *language input*. The readers *process* that and *understand* that. And, of course, when the reader is processing that input, he or she will use his/her *background knowledge*.” |
| **Annotation:** This response is Code 1 & 3. The teacher first mentioned that reading is kind of “language input” which focuses on the text, the words, the language units. Then, she continued to explain that readers needed to “understand” the input and use their “background knowledge,” which to some extent represents the comprehension-driven whole-language model. |
**Data coding and analysis.** It is necessary to do data screening on the categorical variables before the actual statistical analysis (Kline, 2005; Tabachnick & Fidell, 2007). Data screening for this research included descriptive statistics for all the variables, including information about missing data, frequencies, etc. Descriptive statistics for the survey items were reported in tabular forms and frequencies analysis was conducted to identify valid survey responses.

**Quantitizing**

Embedded in the design of the study was the process of *quantitizing*, a mixed-methods approach assigning numerical (nominal or ordinal) values to data conceived as non-numerical (see Figure 5). *Quantitizing* refers to the numerical translation, transformation, or conversion of qualitative data (e.g., Boyatzis, 1998; Greene, 2007; Onwuegbuzie & Teddlie, 2003; Teddlie & Tashakkori, 2006). The non-numerical or qualitative data in the quantitizing process are typically text excerpts or segments from written transcripts or field notes produced from interviews or participant observations (Emerson, Fretz & Shaw, 1995; Poland, 2002). In order to facilitate the process, multiple methods are used, including a variation of content, constant comparison, or domain analysis (e.g., Charmaz, 2006; Hsieh & Shannon, 2005; Spradley, 1979), in conjunction with a priori coding rubric.
Sandelowski, Voils, and Knalf (2009) state that “quantitizing is not confined to mixed methods research, nor does mixed methods research necessarily entail quantitizing” (p.3). Due to different epistemological schools or paradigm constraints, researchers differ in their opinions on whether quantitizing is a component or sub-category of mixed-methods designs. LeCompte and Schensul (1999) highlight ethnographers’ preference in using quantitizing in their field; however, opponents from other fields often criticize the failure of the method to distinguish the quantitative paradigm from the qualitative paradigm. The prevailing debate about the different paradigms has been constantly mentioned in mixed-methods researchers’ works (e.g., Greene, 2007; Plano, Clark, & Creswell, 2008; Tashakkori & Teddlie, 2003).

The research question—“Are Chinese college reading teachers’ stated beliefs about English reading and reading instruction consistent with their actual practices in classrooms?”—led to the statistical method used in the study. Because the purpose of this analysis is to correctly predict the consistency or inconsistency between the teachers’ stated beliefs and their actual practices, cross tabulation (cross-tabs) analysis was used (see Table 5).

As I did in the coding process (see Appendix B), I named each variable in each set with a code or number, for the sake of quantitative analysis. For example, the phonics
model in Set 1 is marked as 1, comprehension-based teaching is marked as 2 in Set 2, and constructivism theory is marked as 3 in Set 3. Therefore, if the codes that appeared in the reading beliefs matched those in teaching beliefs, it shows consistency between reading beliefs and teaching beliefs. That accounts for the basic principle of cross-tab analysis (see Table 3 & 5).

It should be noted that one challenge in coding the stated belief excerpts is that some instructional techniques or foci are not mutually exclusive to each other (Diller, 1978; Johnson, 1992; Stern, 1983). Swaffar, Arens, and Morgan (1982) found that rather than using separate, individual teaching methodologies, teachers tend to share a pool of language-teaching methodologies that informs their actual practices. Therefore, they suggest that defining second language teachers’ actual practices should not focus on solely the individual methodologies but rather on their frequency of using the methodologies.

**Table 5**

*Sample Table of Data Coding*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Reading</th>
<th>Teaching</th>
<th>In/consistency (I/C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1</td>
<td>1</td>
<td>2</td>
<td>I</td>
</tr>
<tr>
<td>Participant 2</td>
<td>2 &amp; 3</td>
<td>1 &amp; 2</td>
<td>I</td>
</tr>
<tr>
<td>Participant 3</td>
<td>3</td>
<td>3</td>
<td>C</td>
</tr>
</tbody>
</table>
To assess the difference in frequencies in reading beliefs versus teaching beliefs, I reported Chi-Square statistics, which accounted for the different count data in each category and examined the distribution across the 2*2 contingency table. Statistics indicated by the Chi-Square analysis indicate whether or not differences between variables are independent from chance. In the study, it indicates whether there are significant differences in frequencies of teaching beliefs between teachers who held a specific kind of reading beliefs and those who did not hold such reading beliefs. If there were significant differences, it meant that reading beliefs and teaching beliefs in the theoretical orientation would be independent from each other, which then indicates no association between reading beliefs and teaching beliefs.

Part II: Qualitative Follow-up

After the quantitative design revealed any inconsistencies among teachers’ stated beliefs about reading and reading instruction and their actual practices in the classrooms, a qualitative design was implemented to further explore what factors trigger the inconsistencies.

Purposive Participants

The purposive participants in the study were seven EFL teachers. I selected these participants according to a few criteria. First, while the majority of the purposive participants showed inconsistency between their stated beliefs and practices, I still included participants who demonstrated consistency between their stated beliefs and practices. In this way, I further developed the picture of what factors trigger the in/consistencies between the EFL teachers’ stated beliefs and actual practices. Second,
the selected participants were also the teachers who showed notable differences in other aspects, such as years of experience, teaching English/non-English major students, gender, etc.—factors which I assumed might trigger some inconsistencies between their teaching beliefs and practices. Further analysis of these factors helped me gain a clearer picture of the roots of any inconsistencies. (See Figure 6 for a breakdown of the selection process).

*Figure 6. Selection Process of Participants from the Sample*

While the subjects were selected from three universities for the initial survey, the seven participants in the qualitative part were selected only from one university due to the inconvenience of logistics and observations. As the seven participants were from four
faculty teams in the university, they were further grouped into four cases for the sake of better observations and analysis.

Case 1 consisted of two teachers, one male and one female. They were both young emerging scholars. The male teacher “Y” had only two years of teaching experience, and the female teacher “D” had been teaching English in the research site for six years at the time of the research.

Case 2 consisted of two middle-aged teachers, “S” and “L,” who were both team leaders in the university. S was humble and easygoing with great leadership skills. L was a teacher with great classroom management skills.

Case 3 was only one teacher, “LY,” who had been teaching English to college students for just under 10 years. She did her master’s degree in the United Kingdom and was the only teacher of the four cases who had a study-abroad experience. She was also a team leader in the teaching faculty and actively involved in administrative work.

Case 4 included two female teachers, “X” and “R,” who were both in their 40s. They were both parents, bringing that perspective to their professional education careers.

Case Study

The case study research method, which is defined as a way to answer research questions concerned with how or why a phenomenon works or occurs (Merriam, 1998; Tellis, 1997), was used in the qualitative section of the present study. Stake (1995) explains that the method allows researchers to “study the experience of real cases operating in real situations” (p. 3). Gall, Gall, and Borg (2003) highlight the desire to describe, understand, explain, and evaluate a phenomenon to account for why researchers
use the method in their research. The depth of the study and authenticity of the natural settings are some of the reasons why case study is favored by many researchers (Gall et al., 2003; Merriam, 1998). Merriam (1998) states that a case study can be either a single case or multiple cases; data generated from case studies can also be analyzed within or between cases.

Case study was chosen to explain the qualitative research data of the present study because of its ability to explore, understand, and describe how Chinese EFL teachers’ beliefs inform their actual practices. Specifically, data from the surveys, classroom observations, and interviews provide rich information about cases examined in the study. Two sorts of case study analyses were conducted in the qualitative section: within-case study and cross-case study. The former provides rich information for individual cases and the latter contributes to the deeper understanding of the belief-practice relationships via the comparisons and contrasts among cases (Yin, 2003). The inclusion of multiple cases informs the external validity of the study (Merriam, 1998).

Data Collection

Figure 7 presents the data collection and analysis process for the qualitative case studies. Classroom observation was used in this stage to address two concerns. First, results from classroom observation helped in re-examining whether the EFL teachers’ stated beliefs really matched their actual practices. While the open-ended questions and the adapted TORP had already helped reveal inconsistencies between their stated beliefs and their actual practices, classroom observation was the most direct way to observe and examine the extent to which their beliefs match their practices. Second, I also used the
classroom observation to look for excerpts that help identify factors that cause the inconsistencies.

Figure 7. Data Analysis Chart

Data Analysis

With my participants’ permission, I sat in all seven participants’ classrooms and recorded their classroom practices. I then transcribed all the audio records of the classroom observations, with the help of two colleagues.

Transcribing classroom observations. I named those transcribed documents with specific titles and filed them in a specific flash drive that I used to store data for the study. As all the classes were English reading classes, all the teachers spoke English primarily. Only in a few situations—when they wanted to emphasize a certain concept, or examine whether students truly understood the meanings of specific terms—did they use a little Chinese. All the classroom observations were thus transcribed in English, with a little Chinese involved. For the Chinese transcription, I transcribed and recorded it in pin yin, the phonetic system of Chinese.
**Summarizing field notes.** While the classroom observation transcript and interview transcripts served as my primary data, field notes were also important to help me retain the data gathered. Loftland and Loftland (1999) suggested that field notes “should be written no later than the morning after” (p. 5). I took some initial notes when I interviewed each participant. Then I summarized them after the interviews. Field notes were helpful in making my codes and categories more salient and leading me towards generating my themes.

**Coding the text.** The data-gathering process in this qualitative part involved classroom observations, interviews, and field notes. After I collected the data from interviews and field notes, I looked across these data to identify and generate categories with which I could fracture the data in order to collect similar phenomena into the same categories (Creswell, 2012; Schram, 2006). By doing so, I further developed themes from which I tried to explore negative cases. During the coding process, I kept comparing my analyses, testing ideas, scrutinizing, and trying to find exceptional cases that did not support the analysis.

**Eliminating redundant codes.** As all the data collected were too much to be presented in a written paper, I took a further step to synthesize the codes and reduced the redundant information, which is a necessary step in every qualitative study (Moustakas, 1994). To implement this action, I analyzed the literal meanings of the codes, counted the numbers of meaning occurrences, and recapped some non-verbal clues connected with the codes. Those redundant codes are neither saturated enough to be grouped into a
specific theme, nor distinctive enough to be included into the current themes. Therefore, keeping these redundancies was considered unnecessary.

**Clustering meaning units to form themes.** After I recorded the interviews, analyzed the field notes, and sorted out my codes, it was time that I clustered the codes into themes. While the data-coding process required me to bracket out, the clustering process was somewhat different. It required me to make judgments from reading relevant literature and seeing the holistic picture of the coding units. I clustered meaning units in this step based on my professional judgment and analysis. The literature review, data collection, and coding process helped me to analyze my data in a rigid and structured way.

**Trustworthiness**

Scholars from the positivistic paradigm had questioned the trustworthiness of qualitative research, because they thought the concepts of validity and reliability could not be addressed in the same way in naturalistic work. Guba (1981) proposed four criteria that should be considered by qualitative researchers in pursuit of a trustworthy study: a) credibility, b) transferability, c) dependability, and d) confirmability. These four criteria can find their correspondents in quantitative studies, for example, credibility parallels internal validity in a quantitative study.

I used several strategies to ensure the trustworthiness of the present study. Member checking was the primary means. Before I did member checking, I first discussed my initial findings with my participants, and elicited their feedback as a way to double-check that my interpretations of what they said and did were accurate. Among the seven participants in the qualitative part, two of them gave frequent and continuous help
throughout the whole process. I met with them up to two or three times a week, beginning in the first semester when I collected the data through to the second semester when I completed my analysis. For the other five, I met with them at least three times a semester when I transcribed their observations. After confirming that the coded findings indicated the actual meaning of my participants’ responses, I asked for input from my doctoral advisors, coursework professors, or peers in my doctoral programs. Then, as mentioned above, during the coding process I continued to look for exceptional and negative cases that called my analysis into question, and then used them to guide my further analysis. The process of comparing and analyzing the exceptional cases also required me to keep reflecting on my data, which thus ensured the transferability of my study. In addition, reviewing the relevant literature and artifacts helped to limit personal bias in examining the data.

Triangulation was also used to ensure the trustworthiness of the present study. Broadly defined by Denzin (1978, p. 291) as “the combination of methodologies in the study of the same phenomenon,” triangulation refers to the influx of research methods used to ensure credibility of data in a study. In the present study, both quantitative methods and qualitative methods were used. For example, even in the qualitative design, I used both classroom observations and participant interviews to double-check the data.

**Ethics of the Researcher**

To make my study trustworthy and meaningful, I have to abide by all the conventions of scientific research, including examining myself as an ethical researcher. Before this doctoral dissertation, I had been doing research for several years, both in the
United States and China. Strictly following the research regulations at Kent State University, I first completed the CITI training course. I then went through an Institutional Review Board (IRB) application at Kent State University, which protects human subjects from being harmed or threatened (see Appendix C). There were no more than minimal risks in the present study beyond those encountered in everyday life. Some of the questions that my participants were asked were of a personal nature and might have caused them embarrassment or stress; however, they were required to read the questions before deciding whether to participate in the study, thus minimizing risks of unanticipated psychological or social stress to my interviewees, who were also kept anonymous via pseudonym in the final paper.

**Limitations and Delimitations**

A few limitations occurred in the study. For example, one limitation is the convenience sampling. The convenience sampling used in quantitative studies may affect generalization to the entire population (Creswell, 2012). In this study, the sample largely represented the Chinese EFL teachers who were working at the universities in a typical Northeastern city in China during the time of the study, but not the entire body of Chinese EFL teachers.

Another limitation may be from the methods used for collecting and analyzing the qualitative data. In this study, I used classroom observations as the primary means to collect my data and basic interpretative coding method to analyze the data. The collecting, transcribing, and analyzing process may constitute a certain kind of biases.
Specifically, due to the time constraints, I was unable to record the classroom observations for longer time periods than the current study actually reported. While the classroom observations used in the study provided a general picture of teachers’ actual practices, they might only reflect temporary or momentary dynamics in the classroom. Teachers might vary from class to class in terms of their performances. In addition, whether the beliefs indicated in actual practices truly represent their articulated beliefs might not be fully examined through class observations. Other methods like interviews may contribute to improving the study design. In addition, the coding process of the qualitative data in this study may be involved with certain biases. For example, while I referred to the literature to classify the three orientations, I still found certain blurred areas between each two orientations. These blurred areas made the coding of the qualitative data difficult and undoubtedly included certain subjectivities.

To reduce the limitations, I provide delimitations of the study. First, this mixed-methods study was conducted only in the Northeast of China to make the study practical and manageable. The sample size and use of a single university might affect the statistical analysis, but was still generalizable to this specific context. The results and findings focus on the uniqueness of the study (Creswell, 2012). Specifically, while this study cannot be replicated exactly in other contexts, it can still be improved in this specific context and provide insights to other contexts.

Second, the purpose of the study was to provide a general picture of relationships between stated beliefs and actual practices, instead of explaining how dynamics in the classroom affect teachers’ belief system. Due to time constraints and research purpose,
the method of class observations was the most straight and effective way to collect my data.

As for the blurred areas among different theoretical orientations, one reasonable explanation is that these theories have interfaces and one is developed to compensate another. For example, Piaget and Vygotsky are two representative figures of cognitivism and constructivism. While their theories are different, they also have some similarities or connections. For example, they both acknowledged that children may construct their own knowledge. However, Piaget (1953) posited that the constructing process can be independent, whereas Vygotsky (1978) posited that the constructing process must be involved with different mediators including adults and social environment. In this study, to group a specific belief in blurred areas into a specific theoretical orientation, I undeniably possessed a certain kind of subjectivities. However, subjectivity does not necessarily equate bias in qualitative studies (Roulston & Shelton, 2015). I analyzed the belief through its deeper meaning and aligned it with the fittest theoretical orientation. To reduce any bias in the analyzing process, I used member checking as the primary means to reduce the potential bias in the transcribing and coding process. In addition, to bracket myself from the subjectivity in analyzing the data, I also met my participants on a regular basis after classroom observations, and asked them to examine whether what had been coded in the qualitative part indicated their true beliefs of reading and teaching reading.

**Summary**

In this methodology chapter, I described the research context (a city in the Northeastern region of China), the rationale for using the sequential explanatory design,
and the stages of conducting the mixed-methods research. The primary two sections in the chapter described the quantitative design and qualitative follow-up, systematically explaining how the research was completed. It is notable that quantitizing, a key part of the research design, was detailed in this chapter to explain how qualitative data can be analyzed in a quantitative way. I also discussed the reliability and validity of the quantitative section and the trustworthiness and researcher ethics of the qualitative design. At the end of the chapter, I provided discussion for limitations and delimitations of the study.
CHAPTER IV

FINDINGS

Table 6 below describes the findings from the current study. It shows the entire data set, which includes both the quantitative and the qualitative data collected and analyzed in Chapter III. Findings are also based on analysis of this data set.

Table 6

*Data Collection and Analysis Chart*

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Data Sources</th>
<th>Collection</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative</td>
<td>Surveys</td>
<td>96 final copies</td>
<td>Multiple rater coding</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chi-square analysis to quantitative findings</td>
</tr>
<tr>
<td>Qualitative</td>
<td>Classroom Observations</td>
<td>Purposeful Sampling</td>
<td>Seven final participants in four cases</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 hours, 900 minutes in total</td>
<td>Transcriptions; coding; analyzing and forming themes;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Within case analysis: Case 1, 2, 3 &amp; 4; Cross-case studies: similarities vs differences</td>
</tr>
</tbody>
</table>

**Part I: Quantitative Survey Data Analysis**

In the following section, I provide answers to two research questions: 1) What are characteristics of Chinese EFL teacher’s beliefs about reading and teaching reading? and 2) Are Chinese EFL teachers’ stated beliefs about English reading consistently indicated in their stated beliefs about teaching reading? I present the characteristics in the following
section; then, I provide three statistical analyses about the in/consistencies between reading beliefs and teaching beliefs to answer Research Question 2.

**Research Question 1: What are Characteristics of Chinese EFL Teachers’ Beliefs about English Reading and Teaching Reading?**

The findings of the study showed that three theoretical orientations about reading (behaviorism, cognitivism, and constructivism) were matrixed with three different belief systems (dominant, dual, and multiple belief systems). Specifically, teachers hold different, mixed orientations. To account for this phenomenon, the three distinct sub-belief systems in the analysis were operationally defined as *dominant*, *dual* and *multiple* belief systems (Johnson, 1992). The matrix indicated a complex belief system about reading and teaching reading among these EFL teachers.

First, multiple reading orientations coexist in the participants’ belief systems. Instead of holding just a single, unique reading orientation, most of the teachers held diverse and multiple orientations—for example, simultaneously being oriented toward behaviorism and cognitivism.

Second, these Chinese EFL teachers’ reading beliefs and theoretical orientations varied from person to person. No even distribution among the three reading belief systems or orientations was found. Among the three reading theoretical orientations, i.e., behaviorism, cognitivism, and constructivism, teachers holding a behaviorism orientation occupy the majority of the sample. Table 7 illustrates how complexity was presented as a major characteristic in the Chinese EFL teacher’s belief system.
**Statistical analysis 1.** A *dominant* reading belief system represents only one theoretical orientation. It resembles what Borg (2003; 2006; 2009) terms as a core belief. Teachers with a dominant belief system occupied 29.2% of the quantitative sample; “behaviorism orientation” was the most commonly coded, with 88 occurrences out of the total 485 (18.1%). Beliefs that fell under dominant constructivism or cognitivism reading orientations accounted for less than 10% of the whole sample, at 7.2% (35 occurrences) and 3.9% (19 occurrences), respectively.

A *dual* belief system stands for the mixture of two theoretical orientations of reading. A matrix with the three potential pairs of dual theoretical orientations was indicated in the study: behaviorism and cognitivism (1 & 2); cognitivism and constructivism (2 & 3); and behaviorism and constructivism (1 & 3). Generally speaking, teachers holding a dual, reading theoretical orientation of any kind accounted for the largest percentage of the entire sample (38.8%), which was almost 10% more than those holding dominant reading belief systems. Teachers holding both behaviorism and constructivism reading beliefs accounted for 17.5% of the participants. Teachers holding both behaviorist and cognitivist reading beliefs accounted for 15.3% of the sample. Teachers with dual cognitivist and constructivist reading beliefs accounted for less than 6% of all the teachers involved in the study. Teachers holding all three reading belief systems, which was operationally defined as a *multiple* theoretical orientation, accounted for 11.1% of all the teachers surveyed (see Table 7).
Table 7

**Basic Descriptive Statistics of the Belief Matrix**

<table>
<thead>
<tr>
<th>Theoretical Orientations</th>
<th>Reading Beliefs</th>
<th>Teaching Beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type</td>
<td>Rep.#</td>
</tr>
<tr>
<td>Dominant</td>
<td>1</td>
<td>88</td>
</tr>
<tr>
<td>Dual</td>
<td>1,2</td>
<td>85</td>
</tr>
<tr>
<td>Multiple</td>
<td>1,2,3</td>
<td>54</td>
</tr>
<tr>
<td>Dual</td>
<td>1,3</td>
<td>74</td>
</tr>
<tr>
<td>Dominant</td>
<td>2</td>
<td>36</td>
</tr>
<tr>
<td>Dual</td>
<td>2,3</td>
<td>29</td>
</tr>
<tr>
<td>Dominant</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td>101</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>485</td>
</tr>
</tbody>
</table>

a. 1: Behaviorism; 2: Cognitivism; 3: Constructivism
b. Dominant: single theoretical orientation; Dual: two theoretical orientations; Multiple: all three theoretical orientations
Similar to the theoretical reading orientations, teachers’ stated beliefs about teaching reading were also defined into dominant, dual, and multiple teaching orientation. A dominant teaching reading orientation corresponds to only one single reading belief system. However, different from reading beliefs, teachers holding a dominant teaching belief system occupied the largest percent of the sample (37.8%). The behaviorists made up the largest group of the entire participant pool (19.6%), and followed by constructivists (11.8%). Only 6.4% of teachers exhibited a cognitivism orientation (see Table 7).

A matrix with three pairs of dual teaching reading theoretical orientations was also indicated in the study: behaviorism and cognitivism (1 & 2); cognitivism and constructivism (2 & 3); and behaviorism and constructivism (1 & 3). Teachers holding dual theoretical orientations occupied 29.9% of the entire sample. To be more specific, teachers holding both behaviorist and constructivist reading beliefs accounted for 14.0% of participants. Teachers holding both behaviorist and cognitivist teaching beliefs made up 12.2% of the study population, while teachers with both cognitivist and constructivist reading beliefs made up less than 4%. Teachers holding a multiple belief system which included all three theoretical orientations accounted for 10.3% of all participants (see Table 7).

In addition to the complex co-existence of different theoretical orientations, findings of the study indicated that relationships among different beliefs were non-linear and unpredictable. For example, one unpredictability occurred in theoretical orientations. Specifically, statistical percentages of a certain belief system did not necessarily indicate
similar percentages of the belief system in teaching, and vice versa. Table 8 illustrates how unpredictability was presented as another major characteristic in Chinese EFL teacher’s belief system.

Specifically, the largest percentage in reading beliefs was the dual belief system (38.8%), whereas the largest percentage in teaching reading beliefs was the single, behavioristic belief system (37.8%). Likewise, the second largest percentage in reading beliefs was the dominant belief system (29.3%), whereas the second largest percentage in teaching beliefs was not the dominant but the dual belief system (29.9%). It was only the multiple belief system that showed a consistency between its reading belief percentage and its teaching belief percentage.

Table 8

<table>
<thead>
<tr>
<th></th>
<th>Reading Beliefs</th>
<th>Teaching Beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominant</td>
<td>143 (29.3%)</td>
<td>183 (37.8%)</td>
</tr>
<tr>
<td>Dual</td>
<td>188 (38.8%)</td>
<td>135 (29.9%)</td>
</tr>
<tr>
<td>Multiple</td>
<td>54 (11.1%)</td>
<td>50 (10.3%)</td>
</tr>
</tbody>
</table>

Likewise, qualitative findings indicated that having one orientation in reading and teaching beliefs was not a significant predictor of which orientation the teacher might hold in actual practice. For example, both S and L held cognitivist reading and teaching beliefs in their survey responses. However, they did not indicate the cognitivist
orientation in their actual practices. This kind of unpredictability will be presented and explained in the qualitative findings of research question 2 and 3.

**Qualitative data supporting the statistical analysis 1– Reading beliefs.**

The following section lists qualitative excerpts from the open-ended surveys that provide further insight into the nature of the teachers’ theoretical reading orientations. Harste and Burke (1977) stated that “theoretical orientation is best thought of as a cognitivist structure or generalized schemata which governs behavior” (p. 32).

**Behavioristic orientation.** Theories in behaviorism, extracted from the learning and psychology fields, have been influencing reading and language arts instruction for many years (Morrison, Wilcox, Madrigal, Roberts, & Hintz, 1999). The behavioristic view of reading regards the activity as a highly mechanical bottom-up process (Gough, 1972). Influenced by theories from Ivan Pavlov, John B. Watson, and B. F. Skinner, reading theorists including Gough (1972; 1993), LaBerge and Samuels (1974), and Rayner and Pollastek (1989) defined reading from a language decoding perspective and believed that English reading means literally the mechanical process of going through materials or text printed or written in the English language (Zainal, 2003). Therefore, reading in this orientation processes two primary features. First, recognizing the individual language units—such as words, sentences, or text—should be the readers’ focus (Morrison et al., 1999; Zainal, 2003). Second, the focus is not on the cognitivist process of understanding the text in this orientation (Gough, 1972).
Given this background on a behavioristic orientation, the following were representative excerpts from the teachers’ survey responses on the meaning of reading English:

Example 1: “All reading materials that are written in English language or that relate to English language in any other languages.”

Example 2: “It means the reading of English articles; the articles may be written by English native speakers or non-native speakers.”

Example 3: “Reading materials printed in English…”

Example 4: “English (reading) means much to me. First, improve the learners' reading skills, enlarge the learners' vocabularies.”

Example 5: “It means reading in English which is formal and refined. This kind of reading requires a certain amount of vocabulary. The sentences are complex and a little difficult to understand.”

**Cognitivist orientation.** Three features emerged from analyzing participants’ beliefs within the cognitivist orientation. First, the role of the reader’s schema and the importance of the reading materials or texts are given equal emphasis within a typical cognitivist reading model (DeFord, 1978; Goodman, 1967). Goodman (1967) stated that “reading is a psychological guessing game. It involves an interaction between thought and language” (p. 2). A reader’s comprehension of the desired information is more important than the information itself. That is, processing the information is more important than simply seeking and acquiring the information (Goodman, 1986; Morrison et al., 1999). Advocating the cognitivist view of reading, Smith (1971) and
Goodman (1967) criticized the behavioristic view of reading for its overemphasis on decoding the text.

Second, meanings of each language unit are conditioned or defined by the reader’s experience and knowledge, which means the reader’s comprehension might be different from the author’s intention due to his/her different experiences and understandings (Barlett, 1932; Rumelhart, 1977; 1980).

Third, cognitivism is a combination of behaviorism and Gestalt’s thinking on proximity, similarity, and traces with their effects on learning as a whole (e.g., Rumelhart, 1977). This nature of combination overlaps and surpasses tenets in behaviorism. While both orientations agree that reading deals with information, the cognitivist orientation focuses on seeking and processing the information in the text. The following excerpts provided evidence of teachers holding dominant cognitivist reading orientations:

Example 1: “English reading refers to a process; by reading one can fully understand the material and the author's thought, and during this process one can learn a lot of things.”

Example 2: “For me, English reading can be divided into intensive and extensive reading. The former requires readers to analyze sentence/text structure, content and expressions. The latter requires readers to comprehend the content from an overall perspective.”

Example 3: “To comprehend and get information through reading in a specific time slot. To comprehend the referential meaning of the text and also share the reader's own understanding and perspectives.”
It should be noted that reading as a skill may fall into both behavioristic and cognitivist orientations, as there is a blur between the two in terms of how the skill is used and developed. If the primary function of the skill is to seek and process information, then these type of thoughts and beliefs are a design feature for the cognitivist reading orientation (Goodman, 1967; 1986; Smith, 1971). However, if the skill is developed only to help a reader to mechanically answer questions from a test, then it shows a behavioristic belief. Example 4 and 5 were excerpts of each paradigm respectively, and Example 6 was a combination of the two. All the excerpts were from the participants’ survey responses.

Example 4: “Reading is the most important skill for English . . . to seek and process information in the reading text.”

Example 5: “It refers to skimming or scanning for information and appreciation and understanding of the meaning between the lines. It involves speed, depth, and width of reading.”

Example 6: “For me, English reading can be divided into two types. The first is reading for testing purposes, that is, how to read to answer questions well. The second is reading for daily use, that is, how to read to enlarge vocabulary and learn.”

**Constructivist orientation.** In terms of the dominant, constructivist reading orientation, teachers’ responses in this category also met one or more of three criteria.

First, *meaning* is at the core of constructivist theory. Mental interactions between readers and writers then become the medium in which readers construct the meaning of
the text (Rosenblatt, 1994; Rumelhart, 1980; Stanovich, 1980). Reutzel and Cooter (1996) stated that “readers must integrate an array of information sources from the text and from their background experiences to construct a valid interpretation of the author’s message recorded in the text” (p. 49).

Second, readers also construct the meaning of the text through a linguistic cueing system that consists of knowledge from syntax, semantics, and pragmatics. Instead of simply a *bottom-up* (behavioristic) or *top-down* (cognitive) process, reading becomes a holistic and recycled process from the part to the whole and then the whole to the part (Rosenblatt, 1994; Rumelhart, 1980; Stanovich, 1980).

Third, real-life situations play an important role in guiding readers to construct the meaning of the text (Bernhardt, 1986; Coady, 1979; Stanovich, 1980). Excerpt examples from the participants’ survey definitions of reading included:

Example 1: “The interaction among the readers, the writer, and the text.”

Example 2: “…fully understand the author's intention of writing; appreciate the beauty of original works; read as much as possible…”

Example 3: “…the reader can enjoy the reading itself.”

Some teachers’ stated beliefs about reading indicated the presence of two reading belief systems—for example, a dual reading orientation between behaviorism and cognitivism. Excerpts to support this kind of presence are as follows:

Example 1: “English reading means a lot to me. It is the best way to improve your comprehensive reading skills, enrich your vocabulary and board [broaden] your horizon.”
Example 2: “English reading is [to] read through a text, process it and understand its meaning and ideas.”

Example 3: “Efficient in reading which might include reading quickly, obtaining necessary information and forming his/her own opinions to agree or not.”

The above examples focused not only on reading skills and vocabulary (features of a behavioristic orientation), but also on ways to broaden one’s mindset and get a deeper understanding of the text. In this way, they showed the features of both behaviorism and cognitivism. Some teachers held a dual reading orientation between cognitivism and constructivism. For example:

Example 1: “To comprehend and get information through reading in a specific time slot. To comprehend the referential meaning of the text and also share the reader's own understanding and perspectives.”

Example 2: “English reading means being informed and touched.”

Still other teachers held dual reading orientations including both behaviorism and constructivism. Excerpts to support this kind of presence were listed as follows:

Example 1: “English reading, for me, means reading extensively and critically in English, it can be novels, practical sciences, etc.”

Example 2: “It is a way to obtain information, entertainment or wisdom through visual capability in the language of English.”

The multiple theoretical orientation referred to teachers’ stated beliefs about reading that indicated the presence of all three reading belief systems. 11.1 percent of
teachers fell into this category. Excerpts to support this kind of presence included the following definitions of reading:

Example 1: “Ability to read English works; English works should be at the level of English proficiency; understand the meaning of author & works.”

Example 2: “It is a language skill; it is a tool to get information via English; it is a window open to another culture.”

Example 3: “To get information about what you need; to get knowledge about vocabulary and cultures.”

Qualitative data supporting statistical analysis 1 – Teaching beliefs. Just as the above section detailed qualitative excerpts regarding reading beliefs, the following section provide qualitative survey excerpts with further explanation of the nature of the participants’ teaching beliefs.

All of the three theoretical orientations, i.e., behaviorism, cognitivism, and constructivism, were found in survey responses from teachers’ stated beliefs about teaching reading. In addition, questions about reading beliefs also indicated specific orientations in teaching beliefs. For example, information on how participants viewed themselves as readers also reflects on their beliefs about teaching reading.

If their teaching beliefs fell into the behavioristic orientation, teachers emphasized measurable and static outcomes. For example, to evaluate whether the students had a sufficient vocabulary and were able to read the words accurately and fluently, teachers typically used read-aloud and decoding methods. Teachers in the behavioristic orientation also emphasized simple and early steps, which they stated would then lead to more
complex levels of performance (Ertmer & Newby, 2013). Representative instructional methods under that emphasis include sentence-making practice, pattern drills, etc. (Zainal, 2003).

Another stated preference of teachers with behavioristic beliefs is to check students’ learning from previous lectures, for example, dictations of words which have been learned in the previous text. Table 9 lists sample excerpts from the teachers’ written beliefs indicating the different methods in the behavioristic orientation.

Table 9

Sample Excerpts from Stated Teaching Beliefs with Behavioristic Emphases

<table>
<thead>
<tr>
<th>Behavioristic Emphases</th>
<th>Sample Excerpts/Keywords in Stated Beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decoding system</td>
<td>Grasp the main points and key words</td>
</tr>
<tr>
<td></td>
<td>Use of transitional words</td>
</tr>
<tr>
<td></td>
<td>Ensure the amount of the vocabulary as input</td>
</tr>
<tr>
<td>Part to whole (bottom-up process)</td>
<td>Deal with some language notes by making sentences</td>
</tr>
<tr>
<td></td>
<td>Find the transitive words in what they read</td>
</tr>
<tr>
<td></td>
<td>Enlarge the amount of reading materials</td>
</tr>
<tr>
<td></td>
<td>Use the given words to make sentences</td>
</tr>
<tr>
<td>Pre-assessment/repetition (response-stimulus)</td>
<td>Dictation</td>
</tr>
<tr>
<td></td>
<td>Read aloud</td>
</tr>
<tr>
<td></td>
<td>Fluent reading</td>
</tr>
</tbody>
</table>

Teachers who held beliefs in the cognitivist orientation generally emphasized reader comprehension and understanding. A reader’s comprehension of the information rather than the information itself is more important (Goodman, 1986; Morrison et al., 1999). For example, a cognitivist teacher may regularly check students’ understanding of a certain word or phrase. Also, teachers in a cognitivist orientation acknowledge the importance of experience and background knowledge, and prefer to teach background
information or cultural background knowledge about the reading text to the students (Bernhardt, 1986; Coady, 1979; Stanovich, 1980).

In addition, as the cognitivist orientation focuses on the seeking and processing of the information read in the text, teachers in this paradigm tend to teach students reading strategies that help them to process the information (Morrison et al., 1999). The following excerpts from survey responses in Table 10 provide examples of teachers holding a dominant, cognitivist teaching orientation:

Table 10

*Sample Excerpts from Stated Teaching Beliefs with cognitivist Emphases*

<table>
<thead>
<tr>
<th>Cognitive Emphasis</th>
<th>Sample Excerpts/keywords in Stated Beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active thinking (comprehension)</td>
<td>Predict the meaning of vocabulary you meet</td>
</tr>
<tr>
<td></td>
<td>Refer to what you have learned</td>
</tr>
<tr>
<td></td>
<td>Reading strategies that help readers to process the information</td>
</tr>
<tr>
<td></td>
<td>Understand the sentence and the words</td>
</tr>
<tr>
<td>Whole to part (top-down process)</td>
<td>Read the text as a whole to infer the word meaning</td>
</tr>
<tr>
<td></td>
<td>Notice the transition of each paragraph</td>
</tr>
<tr>
<td></td>
<td>Summarize the general idea for a better understanding</td>
</tr>
<tr>
<td>Prior knowledge (schemata)</td>
<td>Background knowledge</td>
</tr>
<tr>
<td></td>
<td>Cultural background</td>
</tr>
<tr>
<td></td>
<td>Text learned before</td>
</tr>
<tr>
<td></td>
<td>Guiding questions</td>
</tr>
</tbody>
</table>

Teachers’ responses indicating teaching beliefs in the constructivist orientation included a couple of key characteristics. First, because the mental interaction between readers and writers is considered the process through which readers construct the meaning of the text, teachers prefer to guide the student readers to construct their own
personal meaning (Goodman, 1967; Smith, 1971). In constructivism, teachers emphasize their role as guides or facilitators instead of instructors (Morrison et al., 1999; Zainal, 2003). Also, since real-life situations and affective factors play an important role in guiding the readers to construct the meaning, teachers tend to teach the student readers how to construct an understanding of the text through their past experiences in the real world (Morrison et al., 1999; Zainal, 2003). Table 1 lists sample excerpts from the teachers’ stated beliefs indicating the different methods they used within the constructivist orientation.

Table 1

<table>
<thead>
<tr>
<th>Constructivist Emphasis</th>
<th>Sample Excerpts/Keywords in Stated Beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction with writers</td>
<td>Guess the real meaning of the authors</td>
</tr>
<tr>
<td>Context</td>
<td>Infer the meaning from the context</td>
</tr>
<tr>
<td>Real-world situations</td>
<td>Associate with what s/he has already experienced in reality</td>
</tr>
<tr>
<td></td>
<td>Suppose a scenario that s/he experienced</td>
</tr>
<tr>
<td>Affective factors</td>
<td>Foster students’ interest</td>
</tr>
<tr>
<td></td>
<td>Motivate students to read</td>
</tr>
</tbody>
</table>

Research Question 2: Are Chinese EFL teachers’ Stated beliefs about English Reading Consistently Indicated in their Stated Beliefs about Teaching Reading?

A demonstrated characteristic of the Chinese EFL teachers who participated in this study is complexity in their stated beliefs. As has been analyzed in the section above, Chinese EFL teachers held different and mixed beliefs, regardless of their reading and
teaching orientations. The following section provides a general picture of how in/consistent the reading beliefs were with teaching beliefs. To examine the in/consistency, I have included the Chi-Square statistics. In other words, I used Chi-square statistics to explain the associations between reading beliefs and teaching beliefs. The statistical association in the study may indicate an association between reading beliefs and teaching beliefs, and vice versa.

**Statistical analysis 2: Teachers holding behavioristic reading beliefs vs. behavioristic teaching beliefs.** Behaviorism (Watson, 1913), also referred to as behavioral psychology, posits that all behaviors are acquired through conditioning (Skinner, 1938; 1990). In a reading behaviorist’s eyes (e.g., Gough, 1972, Rayner & Pollastek, 1989), reading as a source of learning takes place when it is separated into small, isolated bits. Reading instruction focuses on conditioning the reader’s behavior (Morrison et al., 1999). Teaching methods involve repetition and association, which are highly mechanical (Shuman, 1986). Behaviorist reading teachers believe that a certain behavioral pattern should be repeated until it becomes automatic. Therefore, methods such as reading-aloud, dictation, and direct/rote instruction are also typically used in reading class (Morrison et al., 1999; Zainal, 2003). Behavioristic beliefs about reading and reading instruction were found among the written responses of participants in this study. However, the statistical results did not indicate an association between behaviorist reading beliefs and teaching beliefs.

To assess differences in frequencies between reading beliefs and teaching beliefs in the behavioristic orientation, I used a Chi-Square analysis, which accounted for the
different count data in each category and examined the distribution across the
c contingency table (see Table 12). The analysis indicated that there was no significant
association between teachers who held behavioristic reading beliefs and those who held
behavioristic teaching beliefs ($\chi^2(df=1)=1.303, p=.254$). Therefore, reading beliefs and
teaching beliefs in the behavioristic orientation were not associated.

Table 12

*Cross Tabulation of Behavioristic Reading/Teaching Orientations*

<table>
<thead>
<tr>
<th></th>
<th>T1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Absent</td>
</tr>
<tr>
<td>R1 Absent</td>
<td>Count</td>
</tr>
<tr>
<td></td>
<td>% within R1</td>
</tr>
<tr>
<td>Present</td>
<td>Count</td>
</tr>
<tr>
<td></td>
<td>% within R1</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
</tr>
<tr>
<td></td>
<td>% within R1</td>
</tr>
</tbody>
</table>

a. Chi($df$) = 1.303(1), $p = .254$,
b. R1 = behavioristic reading beliefs; T1 = behavioristic teaching beliefs

Specifically, Table 11 illustrates that 75.1% of the teachers who held reading
beliefs in the behavioristic orientation consistently applied the behavioristic orientation to
their teaching beliefs. However, 69.0% of teachers who did not hold such an orientation
in their reading beliefs also expressed a behavioristic orientation in their teaching beliefs.
There were no significant differences between the two groups. Likewise, 31.0% of the
teachers had neither behavioristic reading beliefs, nor behavioristic teaching beliefs.
However, 24.9% of teachers without a behavioristic orientation in their teaching beliefs
also showed a behavioristic orientation in their reading beliefs. That is, whether teachers
held the behavioristic teaching beliefs or not was not associated with their behavioristic reading beliefs (see Table 11).

**Statistical analysis 3: Teachers holding cognitivist reading beliefs vs. cognitivist teaching beliefs.** Unlike behaviorism, a cognitivist orientation indicates that learning is a change in individuals’ mental structures, which then renders changes in behavior (Ertmer & Newby, 2013). “Many cognitivist theories focus on how people think about (i.e., *process*) the information they receive from the environment — how they ‘perceive’ the stimuli around them, how they ‘put’ what they’ve perceived into their *memories*, how they ‘find’ what they’ve learned when they need to use it, and so on…collectively known as *‘information processing theory’*” (Ormrod, 2008, p. 163). Specifically, in cognitivism the thought process behind the behavior is more important for a person’s learning than the behavior itself (Goodman, 1967). With reference to reading and reading instruction, reading comprehension rather than language units are what readers and reading teachers are more concerned with (Ertmer & Newby, 2013; Morrison et al., 1999; Zainal, 2003).

In this study, statistical results did not indicate any association between teachers’ cognitivist reading beliefs and their cognitivist teaching beliefs (see Table 12). Similar to the association examination between teaching beliefs and reading beliefs in the behavioristic orientation, I used a Chi-Square analysis and reported the statistical results for the cognitivist orientation in Table 13.
Table 13

*Cross Tabulation of Cognitivist Reading/Teaching Orientations*

<table>
<thead>
<tr>
<th></th>
<th>T2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Absent</td>
<td>Present</td>
<td></td>
</tr>
<tr>
<td>R2</td>
<td>Absent Count</td>
<td>121</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>% within R2</td>
<td>65.4%</td>
<td>34.6%</td>
</tr>
<tr>
<td></td>
<td>Present Count</td>
<td>121</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>% within R2</td>
<td>59.6%</td>
<td>40.4%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>242</td>
<td>146</td>
</tr>
<tr>
<td></td>
<td>% within R2</td>
<td>62.4%</td>
<td>37.6%</td>
</tr>
</tbody>
</table>

a. $\chi^2(df=1) = 1.387, \ p = .239$

b. R2 = cognitivist reading beliefs; T2 = cognitivist teaching beliefs

Table 13 indicated that there was no significant association between cognitivist teaching beliefs and cognitivist reading beliefs held by teachers ($\chi^2(df=1)=1.387, \ p=.239$). To be more specific, while the percentage of teachers who held cognitivist reading beliefs and then applied them to their teaching beliefs was 40.4%, the percentage of teachers who did not hold cognitivist reading beliefs but then showed a cognitivist orientation in their teaching beliefs was 34.6%. There was only a slight difference. Therefore, reading beliefs and teaching beliefs in the cognitivist orientation were not found to be associated.

**Statistical analysis 4: Teachers holding constructivism reading beliefs vs. constructivism teaching beliefs.** A classroom led under a constructivist orientation shows marked differences from a behavioristic or cognitivist instruction classroom. A constructivist teacher prefers to incorporate ongoing experiences into student learning by focusing on the negotiation and construction of meaning among small groups and
individuals (Lantolf, 2000). When it comes to reading and reading instruction, constructionist teachers believe that reading is about constructing and discussing meanings of the text, and that instruction should focus on how to encourage students to read, create meaning, and learn by peer discussion (Cambria & Guthrie, 2010). Reading should not be only about language units, but also about appreciating what you read (Wilson & Yang, 2007).

Table 14

Cross Tabulation of Constructivist Reading/Teaching Orientations

<table>
<thead>
<tr>
<th></th>
<th>T3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Absent</td>
</tr>
<tr>
<td>R3</td>
<td></td>
</tr>
<tr>
<td>Absent</td>
<td>114</td>
</tr>
<tr>
<td>% within R3</td>
<td>53.8%</td>
</tr>
<tr>
<td>Present</td>
<td>72</td>
</tr>
<tr>
<td>% within R3</td>
<td>40.9%</td>
</tr>
<tr>
<td>Total</td>
<td>186</td>
</tr>
<tr>
<td>% within R3</td>
<td>47.9%</td>
</tr>
</tbody>
</table>

a. Chi($df$) = 6.377(1), $p = .012$, $\Phi = .060$
b. R3 = constructivist reading beliefs; T3 = constructivist teaching beliefs

The Chi-Square analysis in Table 14 indicated that there was a significant association between constructivist teaching beliefs and constructivist reading beliefs ($\chi^2(df=1)=6.377$, $p=.012$). To be more specific, among those teachers who held constructivist reading beliefs, about 59% also held constructivist teaching beliefs. Similarly, among teachers who did not hold constructivist reading beliefs, about 54% did not hold constructivist teaching beliefs either. However, statistical result only indicated a
weak association between reading beliefs and teaching beliefs in the constructivist orientation ($\Phi = .060$).

**Part II: Qualitative Classroom Observation Analysis**

The section above provided a general picture of how quantitative data was analyzed in the study. In the quantitative section, statistical and descriptive analyses were conducted to answer Research Questions 1 & 2. In this qualitative analysis, I describe my data on teachers’ classroom observations and integrate them with the findings from the survey responses. The whole process is aimed at responding to Research Question 3: Are Chinese EFL teachers’ beliefs about reading and teaching reading consistently observed in their actual practices? I used an abductive and iterative method to analyze the qualitative data (Dörnyei, 2007), which were generated from both classroom observation and survey responses about teaching beliefs. An abductive analysis entails a form of logical inference that starts with observations seeking the simplest and most likely explanation, while an iterative analysis is a process built on systematic and recursive repetition (Richardson & Krammer, 2006).

In a multiple reading theoretical orientation system, core and peripheral beliefs coexist. A core belief was similar to a dominant belief; it outperformed peripheral beliefs in percentage and frequency in the belief system. This finding was in accordance with Borg’s (2003; 2006; 2009) work on teacher cognition and practice.
Research Question 3: Are Chinese EFL Teachers’ Beliefs about Reading and Teaching Reading Consistently Observed in their Actual Practices?

As described in Chapter III, while the teachers who participated in the quantitative survey were selected from three universities as the research sites, the seven participants in the qualitative section were selected from only one university due to the necessity of convenience and logistics in the observations. As the seven participants were from four different teaching faculty teams in the university, they were further grouped into four cases for the sake of better observations and analyses. The following section provides a detailed analysis to findings of the seven participants’ stated beliefs and actual practices. It then describes the qualitative findings in four cases.

**Case 1: Y & D, supporters and implementers of dual, consistent reading/teaching beliefs.** Two of the observed teachers expressed a dual reading belief system in their surveys, and then applied their reading and reading instruction beliefs consistently to their actual practices in the classroom. For both teachers, the theoretical orientations comprising a dual belief system including behaviorism and cognitivism.

*Beliefs about English reading and teaching reading.* An analysis of the responses from the survey questions indicated that, statistically, those who held behaviorist and cognitivist reading beliefs did not necessarily hold teaching beliefs in the same domains. As the exceptions, Case 1 were particularly consistent in their beliefs; thus, their answers on teaching and reading often overlapped. Responses from both areas will be explored below to paint a comprehensive picture of their belief systems.
Y, when asked to define reading in the survey, stated “English reading means a lot to me. It is the best way to improve your comprehensive reading skills, enrich your vocabulary and board [broaden] your horizon.” He believed that language skills and vocabulary were the key points for defining English reading, which indicated a cognitivist (skill-based) and behavioristic (language units) reading model. For example, when asked how to help students solve problems they meet in reading, Y responded: “For words, I insist on teaching them the root, the prefix, and the suffix. For pronunciation, I teach them vowels and consonants one by one…” The word “insist” in his response indicated his attitude toward the method he used to teach. The prefix-root-suffix pattern in word formation is a behavioristic way to view words as a combination of different linguistic units. Y also believed that vowels and consonants are important to students’ pronunciation. The decision to teach these vowels and consonants “one by one” also indicated Y’s belief that teaching is a mechanical process. Y further explained what he thinks would develop students’ reading ability: “first and foremost, they must enhance their basic skills. For example, grammar and basic words.” Again, his belief of teaching English words and grammar was indicated in his survey responses.

While Y acknowledged the role that language units play in a sentence, he also taught reading skills and focused on reading comprehension. These constructs served as cues of a cognitivist theoretical orientation. For example, when asked to define what good reading is, he stated that “a good English reading can be divided into two aspects, including comprehensive reading and skimming and scanning.” Y thought extensive reading and the read-aloud method were very important in a student’s reading process.
His dual belief system regarding reading was also reflected in his survey response to the question “What should an English teacher do to help his/her student who does not read well?” He believed in three primary ways to help struggling EFL readers: the primary way was to “enhance their basic skills, for example, grammar and basic words.” His clarification on what basic reading skills are included the learning of small language units, such as grammatical rules and basic words. The first step in his response indicated his perception of the importance of vocabulary in English reading (a behavioristic view). He went on to expand: “Second step: try to understand the context. Third step: learn more background information.” The second and third steps indicated a cognitivist orientation, as both context and background information are mediators to help students reading comprehension. Because the other two methods were more cognitivist in nature, focusing on understanding, he exhibited a balanced approach between the two schools of thought.

Similarly to Y, his colleague D defined English reading in three primary functions: “1) Comprehension 2) Searching for information 3) One basic requirement of learning English.” Comprehension—which is the focus of the cognitivist school (Goodman, 1967)—the emphasis on information-seeking, and the perception of reading as a basic skill illustrate that D’s beliefs of reading instruction lie, at least in part, within a cognitivist orientation.

However, D’s cognitivist beliefs were peripheral to her core behavioristic reading belief. For example, when asked how to define a good reader, she stated that a good English reader is someone who has “a good grasp of English vocabulary” and “a good understanding of English words.” A good reader “knows every word in all kinds of
material he reads and can understand it thoroughly.” The emphasis on language units, especially vocabulary, evidenced D’s behavioristic theoretical orientation. Therefore, for D, her perception and beliefs about English reading and reading instruction indicated both behavioristic and cognitivist orientations.

Like Y, D held behavioristic and cognitivist orientations, and her beliefs were indicated in her open-ended survey responses about defining and explaining both reading and teaching reading. For example, when asked what might be helpful strategies for solving problems with reading, D answered: “Guess the meaning according to the context. If it hinders his understanding, look it up in the dictionary or search for information about it.” The inferential method from the context indicated a cognitivist reading orientation, which equated making predictions through reading to a psychological guessing game or process (Goodman, 1967; Smith, 1971). The assistance from the dictionary indicated a focus on the phonemes and word meaning, both language cues in the behavioristic paradigm (Gough, 1972). D’s beliefs represented a dual belief system including both cognitivist and behavioristic tenets.

When asked how she as a teacher can help students improve their reading abilities, D stated that she would encourage students to enlarge their vocabularies and do more reading. She further suggested three primary strategies that would benefit her students in developing their reading: “1) Guess meaning from context. 2) Inspire students’ learning interest. 3) [Increase/Improve] The communication between teachers and students about reading skills.” Each of these practices has its roots in cognitivist theory. However, D’s
further response that reading interest should be built upon extensive reading led it back to a behavioristic orientation.

**Observations of actual practice.** Both Y and D held a dual belief system of behaviorism and cognitivism in both their reading and teaching reading beliefs. The following section presents how their stated beliefs were consistently indicated through observations of their actual practices.

Y, who frequently used decoding and direct teaching in his class, also emphasized vocabulary instruction and word formation rules. The excerpt below was selected from his opening of a new lesson.

Q: Do you still remember at last class we have a test, right? In order to learn from the text, we get a review of them, okay? Let’s get the review together. The first one, identify, do you still remember? Through identify, we can get a word identity, right? Remember the root—ident. This word credit, and we have another word credible. And then you can see (inaudible), do you remember it?

A: Yes.

Q: *Vinc means conquer*. And there is another very important word — anorexia.

Do you know what does it mean?

A: Yeah.

Q: …You have got it. And then supplement. Is it a verb or noun?

A: Verb.

Q: *Ment, ment. It’s a verb*. I told you it’s a verb. Okay. And we have the last phrase, *by all means*. Okay, so what’s the meaning of *by all means*?
Y used typical, rote instructional methods to teach reading, including the decoding method. Right after he began his class, he used the lexical method, which describes a word in the form of prefix+root+suffix, to teach three words to students, i.e., the root “ident” in the paired words “identify – identity,” the root “vinc,” which means “to conquer,” and the suffix “ment” in the word “supplement.” Using a similar method, Y frequently divided phrases into their constituent parts. For example, he taught phrases such as “be into,” “be/get involved in” and “a sense of” on a regular basis. After reading any single sentence including typical phrases or collocations, he taught these phrases to the students. The following example is selected from the transcript.

Yeah. She is unable in which aspect? “To be ‘thin’ began to torture me.” Okay, you remember the meaning, it’s very good. “I found myself involved in competition again.” We have learned “involved in,” right? In paragraph three, she says that she is always involved in competitions — dancing, horseback riding. And then “but this time, I was competing against myself.” She competed with herself. Against is a preposition. You can remember this sentence.

Y taught text paragraph by paragraph, in a bottom-up decoding approach. Additionally, for every paragraph, students were asked to read aloud. All those methods indicated a behavioristic orientation (Morrison et al., 1999; Zainal, 2003). However, there were still cognitivist aspects to his teaching style. One example that illustrated how Y held dual belief systems is that when he taught a specific concept, he encouraged students to go back and forth in the text to look for clues that led to the comprehension of a certain concept. For example,
Yes, there is no perfection. Right? And we know the background — the author wants to achieve perfection, in paragraph one. In paragraph two, we see there is a very useful phrase called a supportive family. It means the family condition is very good. Why does the author not use “a rich family” here? Think about it. If I say he has a very rich family, I just mean his family has much money. But I don’t express that the family have hearts. Okay, let’s go on. In the paragraph three, I want to ask you several words. And the second line, she says I was into acting by age seven. So, what does “was into” mean?

The first few sentences painted a picture of how Y was leading his students to what they had learned in the previous paragraphs to review a concept and then associate that concept with new knowledge. This method tied in with the cognitivist belief that schemata were important in one’s comprehension of a certain concept (Goodman, 1967; Smith, 1971). However, at the end of the excerpt, he again focused on an individual word or phrase (“was into”), which indicated a behavioristic orientation (Gough, 1972).

D, conversely, exhibited few if any cognitivist practices during my observation of her. She used the translation method (a form of decoding) to let her students translate the words or phrases from their first language (L1) into a second language (L2) and vice versa. As a behaviorist, D focused on the integration of language skills, which indicated a skill-based reading model (Morrison et al., 1999; Rosenblatt, 1994; Stanovich, 1980). For example, when she was prompting the students to analyze paragraph structure, she taught students how to use supporting
details or examples to prove their argument and thus improve their writing. In addition, D taught the past tense or past/present participle of a word on a regular basis in her class in order to encourage memorization, which further indicated a decoding way of teaching reading.

_Consistency between beliefs and actual practices_. Y and D’s both exhibited a behavioristic beliefs core and a peripheral cognitivist belief. The primary purpose of reading, in their stated beliefs, was to seek information, learn language units or segments, and comprehend a reading text. The participants comprising Case 1 further believed that reading was primarily composed of language cues, including words or phrases, and teaching reading meant to teach students these cues. Their stated teaching beliefs prioritized direct/rote instruction, the translation method, the decoding approach, word formation rules, and focus-on-form.

They also believed that guiding students to comprehend a text was important in developing students’ reading ability, evidencing a significant cognitivist viewpoint. However, while they expressed their belief that understanding a text was important, they believed it was relatively less important than teaching vocabulary, phrases, or sentence structures to their students, thus leaving that belief on the peripheral of their behavioristic framework. They believed that students can understand the text as a whole only when they first understand all the individual words or sentences. The two teachers showed consistency between their stated beliefs and actual practices.
Case 2: S and L, advocates of multiple reading beliefs but practitioners of a dual belief system. In contrast to Y and D, other teachers showed inconsistencies between their stated beliefs and classroom practices. S and L, the participants that make up Case 2, indicated a multiple reading belief system in their surveys, but then practiced a dual belief system in their reading instruction. Because they differed in their responses, in the following sections I will discuss them individually before analyzing their differences and similarities.

S's beliefs about reading. S indicated a dual belief system about English reading. S defined English reading as “The process of using *English words to obtain information*. A cognitivist process which involves using previous knowledge to enhance language learning.” The focus on English words, information seeking, and cognitivist processes indicated that S held both behavioristic and cognitivist theoretical orientations. S believed that language units, particularly words, were the medium through which a reader can search for information.

When asked how to define good English reading, S stated: “A good English reading entails [knowing] the general structure of a text, the main idea of each paragraph in a given discourse.” The response indicated a whole-language approach that emphasized the structure of a text as a whole (Anderson & Pearson, 1984; Rumelhart, 1980). He also believed that:

A good reader should have *a large vocabulary, a solid background knowledge and the passion to acquire information through English media*. A good English reader can *solve his/her problem independently*. 
This response indicated multiple theoretical orientations: e.g., a large vocabulary showed a behavioristic orientation, a solid background knowledge represented a cognitivist paradigm, and the passion and problem-solving ability indicated a constructivist belief system. His beliefs in a cognitivist orientation also appeared in his definitions of good reading and a good reader, whereas his beliefs in the other two orientations only appeared in the latter. Thus three orientations co-existed in his belief system; his constructivist and behavior orientations were peripheral compared to the core cognitivist beliefs indicated in his response.

*S’s beliefs about reading instruction*. While S exhibited a belief in multiple theoretical orientations (all three) when defining English reading and readers, he did not include constructivism in his ideas about how reading instruction should be provided to EFL students. His core beliefs were both behavioristic and cognitivist. He believed that direct instruction, understanding of the cognitivist process of reading, and effective reading skills are important and helpful to EFL learners in a behavioristic orientation. He also believed that students should be taught how to comprehend main ideas within each paragraph and identify the general structure of an essay. Moreover, he believed that inter-thinking, brainstorming, and consideration of unity and coherence were also important for EFL learners. These areas of focus indicated a cognitivist orientation in their emphasis on understanding (Anderson & Pearson, 1984; Morrison et al., 1999; Rumelhart, 1980). He also felt that “a good vocabulary and culture background knowledge are of crucial importance to his EFL students,” putting him within the behaviorist orientation as well.
**L's beliefs about reading.** L also held a dual theoretical orientation that included behaviorism and constructivism. For example, in her definitions of English reading/good English reading, she stated:

> It’s a way to acquire knowledge and perceive the world in another language besides your mother tongue. And as a second language learner, it also helps to improve language proficiency. . . . Good English reading is a process in which readers can fully understand the content in details. Reader can get the theme as well as the author's intention. At the same time, readers can appreciate the beauty of English writing.

She focused on reading skills/strategies, language proficiency, and content details that indicated a behaviorist orientation when defining a good reader. She also acknowledged affective factors like communication between reader and writer and aesthetic appreciation of the language, etc., which indicated that meaning was constructed between reader and writer and between reader and text in a constructivist orientation (Ertmer & Newby, 2013; Stanovich, 1980). When asked to give an example of an ideal good reader, she mentioned a friend of hers who read quickly and was capable of quickly comprehending content material. She also believed her friend to be a good reader because he read out of joy and pleasure, not obligation. This focus on content and holistic understanding was held by the constructivist school. She indicated her behavioristic orientation by highlighting reading fluency and the importance of extensive reading—both mechanical processes of reading (Gough, 1972; LaBerge & Samuels, 1974).
**L’s Beliefs about reading instruction.** Unlike S, L’s stated beliefs of reading in a dual behavioristic and constructivist way were indicated consistently in her stated beliefs about teaching reading. For example, when asked how to help students solve problems met in reading a text, she said:

> If it is an unfamiliar word, s/he can easily find it *in dictionary* or even just neglect it. But for the understanding of a sentence or a point, a good reader *may repeat reading it or go on reading and then try to understand it in a larger context.*

L believed that understanding the text using context is helpful in solving EFL students’ problems. She reported other strategies to help her EFL students as well. For example, she felt strongly about the importance of consistently practicing key skills; this kind of belief mirrors the stimulus-and-response theory by B.F. Skinner, a typical representative of behaviorism who influenced the reading field by highlighting the mechanical process of reading (Gough, 1972; LaBerge & Samuels, 1974). Together with these behavioristic beliefs, L believed a constructivist philosophy could also help her students. She said, “to find out the problem s/he has in reading and give s/he (him/her) suggestions according to the problem, such as *enlarging vocabulary, improving reading skills.*” She used a case-by-case analysis and suggestion-instead-of-solution way to guide her students.

Her multiple beliefs about reading were revealed in her survey responses. For example, when asked how she could help her students improve their reading proficiency, she stated:

> I'd like to pose questions before their reading. Students will find the answers during their reading. *These questions will help them to understand both details*
and main ideas of the text. After that, I'd like to help students understand the merits of this writing.

Her primary reason for using guiding questions was to help her students grasp main ideas and details within the text. In her further explanation of why she found such strategies useful, she stated that through guiding questions her class covered most of the skills in English reading. Again, this skill-focused belief indicated a cognitivist orientation (Goodman, 1967). The last question in the survey was “What is the most important factor in teaching reading?” L responded:

I think the most important in teaching reading is to help students improve English proficiency as well as their interest in reading. They can get information quickly if they want it. They can also enjoy reading a great piece of work in spare time.

Her belief in the behavioristic orientation was indicated in this response (“improving language proficiency”), which also indicated behaviorism via the focus on the language cues (Gough, 1972). In addition, “arousing the student interest” is a tenet of constructivism, which highlighted the affective factors and scaffolding function in reading (Stanovich, 1980).

S and L’s methods used in actual practice. In practice, both S and L showed a preference for teaching reading in a hybrid way, with behavioristic and constructivist reading orientations involved. As in Case 1, the cognitivist viewpoint was not apparent. S and L both believed that leading students to associate reading excerpts with their own experiences or with real-world problems was important. For example, in S’s class, when
he taught the phrase “deep and shallow” to his students majoring in navigation
engineering, he prompted them to think about a situation they might actually encounter:

For example, like you, if you work on board the ship and you become the first
officer and the second officer. You will direct your ship and navigate the ship just
along the coast area, right? Usually, the coast area is very shallow. It’s not so deep
enough.

While S used real-world association (a constructivist method) on a regular basis in his
class, he also adopted the decoding method to teach English words to his students. For
example, he taught students to distinguish paired words like “wonder-wander” and
“alone-lonely.” The way he led students to distinguish language units like phonemes and
morphemes indicated his behavioristic orientation of instruction. Similarly, S asked
students to make sentences with given words, chop sentences into pieces, and arrange
single pieces in sequence to better their understanding.

While S used both orientations on a regular basis, the dominant methods used in
the classroom were of a constructivist orientation, particularly in the instances of his
citing real-world examples. Sometimes, however, the two orientations were difficult to
distinguish. For example, when he explained the phrase “seven seas” to his students, he
said:

What are the seven seas? I think here seven is not definitely a number. Seven
just means many. Just like in China, we say cloud nine and the eighteenth hell.
So that number is not exact number, right? So just take it as so many. So, all
the waters, remember I have told you water is a uncountable noun, right?
Anyway, when we mention this word, waters in maritime English indicate
different … just the areas of water. Indian Ocean, Atlantic Ocean, Pacific
Ocean, maybe (Inaudible). So, it is different areas of water. In Chinese we can
say Shui Yu. It is different areas of water in maritime English. Here, seven
seas I think mean different areas and different waters. Although they are
different areas, they connect with each other, right? Yes or no?”

At the surface level, S used some behavioristic orientations. To be specific, he used
Chinese-English association and translation, and also focused on the class of the word
(e.g., whether it is a countable or uncountable noun). The primary purpose of these
methods was to figure out the meaning of the word. However, further analysis of his
teaching methods indicated that he was actually guiding the students to associate their
new knowledge (the idiom of “the seven seas”) with their current knowledge (water’s
uncountability and the Chinese phrase Shui Yu), a process more easily identified as
constructivist.

Similar to S, L also used a hybrid of behavioristic and constructivist
orientations to teach reading, omitting the cognitivist orientation she demonstrated in
her survey responses. Key behavioristic examples included her use of diction at the
beginning of the class to reinforce students’ memorization of key lexical items. She
paid particular attention to students’ spelling and correct use of parts of speech. For
example, she asked the students to figure out whether a word was a noun or an
adjective on a regular basis in her class. L analyzed almost the entire text sentence by
sentence, phrase by phrase. A frequent signal phrase she used while teaching was
“XXX means XXX,” and a typical instructional method she frequently used is read-aloud, both of which fall into the behavioristic category.

Also like S, L used constructivist methods to associate students’ learning with real-world experiences. For example, when she introduced concepts from e-commerce, she asked students to think about their actual shopping experiences. The tools she used to guide the students to internalize their knowledge and construct meaning indicated a constructivist orientation (Morrison et al., 1999; Rosenblatt, 1994; Stanovich, 1980).

L frequently associated concepts with real-world experiences in her class. Besides the above-mentioned e-commerce example, L also led students to discuss their feelings about watching American TV series, e.g. *The Walking Dead* and *The Big Bang Theory*. The purpose was for students to discuss the effects that TV series might have on people's lives and what kind of plots the students found interesting. She used all these activities to lead students to speak in English. Compared to S, L more frequently spoke about the text as a whole, and used more association methods to lead students to speak aloud and discuss it. During the observation period, the time allocated to students for peer discussion and group work in L’s class was more than that in S’s class.

While the two teachers used similar dual-oriented, interactive ways of teaching, they did have differences in their methods. While both teachers used constructivist orientations, L’s use of constructivist methods was more frequent than S’s. Except for the dictation activity L used at the beginning of her class, she seldom
used any behavioristic methods. Conversely, while S did hold a dominant constructivist orientation in his teaching practice, he used more behavioristic methods than L did in the classroom.

**Inconsistency between beliefs and actual practices.** In classroom observations, S and L both showed an inconsistent attitude between their beliefs and their practices. While they both held a multiple reading belief system in their stated reading and teaching beliefs, they acted in dual theoretical orientations in their actual practices. To be more specific, both S and L believed in behavioristic, cognitivist, and constructivist theoretical orientations in their survey responses. However, when they taught their students in the actual classroom, they taught in an interactive way between behaviorism and constructivism. Their frequent use of constructivist methods in actual practice was not indicated in their stated beliefs about either reading or teaching reading.

In terms of their stated beliefs about reading and teaching reading, S’s survey results indicated an inclination toward all three reading orientations. For example, in the survey he stated: “a large vocabulary” represented a behavioristic orientation, “a solid background knowledge” represented a cognitivist orientation, and “the passion and problem-solving ability” represented a constructivist belief system. However, from classroom observation, it indicated that a constructivist orientation was peripheral, compared to the core, cognitivist beliefs in his response.

However, with reference to his actual practice, S acted in a constructivist way by using interactive activities such as thinking aloud and association. While S used
real-world association methods on a regular basis in his class, he also adopted the decoding method to teach English words to his students. In other words, he believed that the constructivist orientation as core beliefs, and the behavioristic orientation as peripheral beliefs.

Similar to S, L also showed an imbalance in her way of teaching. She used more constructivist methods like association with real-world experiences. For example, L used case-by-case analysis and suggestion-instead-of-solution methods to guide students. Her survey responses indicated that behaviorism and cognitivism informed her of how to define reading and helpful reading strategies. In her further explanation on why the strategies she had mentioned were useful, she stated that these strategies cover most of the skills in English reading. She indicated a cognitivist orientation.

L also used a constructivist method to associate students’ learning with real-world experiences. The method of associating concepts with real-world experiences was frequently used in L’s classroom. Compared with the behavioristic methods, she used far more constructivist methods in class. L’s actual practice indicated that she held a core constructivist orientation with a peripheral behavioristic belief system. The dual belief system observed in her actual practice was not consistent with what she stated in the survey response.
Case 3: LY, contradictor among reading beliefs, teaching beliefs, and actual practice. LY indicated several inconsistencies. More specifically, there was inconsistency between her reading beliefs and teaching beliefs, as well as between her beliefs and practices.

Beliefs about reading. LY indicated a dual belief system in defining English reading. She believed that English reading was closely connected with reading skills. When asked to define English reading, LY defined it as “the most important skill for English.” However, together with this cognitivist orientation (defining reading through a skill perspective), LY also acknowledged the “eye-broadening, entertaining and time-killing” function of reading. This indicated a constructivist orientation.

The dual-belief system in her definition of English reading was also present in her responses to other survey questions. For example, when asked how to define “a good reading,” she stated that “a good reading enables its readers to get something in a relaxing and entertaining way.” This response conveyed two layers of meanings. Reading enables readers to receive information (a behaviorist orientation), and reading should also occur in a relaxing and entertaining way (a constructivist orientation). Her statement that “a patient, perseverant person who loves English can make a good reader” indicated both behavioristic and constructivist orientations, too. Her use of the ideas patience and perseverance indicated a behavioristic belief in the importance of practice and repetition. However, the attributive clause “who loves English” indicated a constructivist orientation, as affection plays an important role in making a great reader.
**Beliefs about teaching reading.** When asked how to help a student who cannot read well, LY suggested: “try to select some proper material for him/her and help him/her develop a solid foundation or language skills first.” Her beliefs regarding learning vocabulary within a text indicated a behaviorist orientation. LY believed that looking up words in a dictionary or online — in her own words, “check something on the internet; check books to figure out the meaning” — would be effective, instead of reading the passage as a whole to guess the word meanings.

In contrast, LY also expressed her belief about reading instruction in a constructivist way: “Reading I thought was not taught. A teacher's role should be encouraging students to have interest in books and want to learn more. So, I choose to encourage and give pressure to students to read as much as possible.” LY’s interpretation about a teacher’s role in teaching reading indicated a constructivist model. She preferred to guide students rather than merely teach them to read (Stanovich, 1980). She believed that being a guide or facilitator, instead of a teacher or instructor, was more meaningful for a reading teacher. In her own words, reading “was not taught.”

When asked whether the methods she had proposed for teaching reading were effective, LY indicated that the effectiveness of those methods depends on the students and teachers. She believed it should be examined case-by-case, rather than with a one-size-fits-all approach. She further restated that “encouraging students to read” was central to good reading instruction.

**Methods used in actual practice.** LY’s teaching methods included all three orientations. She spent more time, however, on methods from the cognitivist orientation
models in her actual practice. For instance, she focused on students’ comprehension and understanding of vocabulary and text, and used association—e.g., asking students to picture a certain concept in their minds to better their understanding of the concept. For example, see the following excerpt:

T: How do you understand *scary*?
S: *Xia Ren De*.
T: Something is fearful, something is frightened, something that they can make her feel terrified. Do you remember the word terrified? She found terrified. She was fearful about her childhood. What do you know about your childhood? If you will use one word to describe your childhood, what do you use to describe this? Everyone thinks about this. What do you feel about your childhood?

LY first focused on language units, e.g., the word “scary.” However, she then asked students to associate the concept with real-world experience. This indicated her focus on the comprehension and understanding of the concept, instead of specific words.

LY’s focus on students’ understanding of concepts or text was also indicated in her efforts to check students’ understanding of every individual sentence throughout the entire text. Although LY used mostly cognitivist methods, she also adopted other methods like read-aloud, decoding, and phonic analysis to teach words in her class. These methods indicated a behavioristic orientation (Gough, 1993). Sometimes LY used sentence paraphrasing and translation methods, and other times she asked guiding questions, which were also behavioristic strategies.
Now, the last sentence, which is also the key sentence. “I want everyone’s praise.”

Not prize. So, what does praise mean? Praise means people say you are doing well, well done, and acceptance. Acceptance means people acknowledge your performance. “But as my own toughest,” toughest the simple form of which is tough. OK, so what is tough. Can you say something? Hard. It’s hard or sometimes very strong. You are a tough guy. You are a tough guy because you are not afraid of any difficulties. Ok, this is a part. Here the sentence “as my own toughest critic,” what is critic? When you see critic, you mean you are critical and picky. That means you are satisfied or not?

The method she used here was very structured. She guided students to learn almost every new word in the sentence and also led students to read aloud on a regular basis.

**Mismatch between beliefs and actual practice.** Compared to Case Studies 1 and 2, LY indicated more inconsistencies between her stated beliefs and practice.

In terms of beliefs about reading, LY had a multiple reading belief system that included all three orientations. While she leaned more towards a constructivist orientation, she maintained beliefs in the other two orientations. However, the multiple beliefs she held in her stated responses about defining reading were not consistently indicated in her stated belief about teaching reading. Instead of a multiple belief system, LY indicated a constructivist orientation as her core belief and behavioristic orientation as the sole peripheral belief.

In terms of actual practice in the classroom, LY used more behavioristic and cognitivist methods, which were different from the orientation indicated in her stated
responses about teaching reading. More specifically, in her stated beliefs about teaching reading, LY indicated a constructivist orientation, which helped foster students’ interest in reading and sets up teachers as guides or facilitators. However, in actual practice, LY was more instructor than facilitator. She used more rote instruction and read-aloud methods. Therefore, inconsistencies between her stated beliefs about teaching reading and her actual practice were indicated.

Another inconsistency was also indicated. LY indicated a prioritization of behavioristic models in her actual practice, which contradicted the multiple beliefs stated in her responses about defining reading. Despite her statement that she valued constructivist, behavioristic, and cognitivist orientations, LY hardly used the first in the classroom.

**Case 4: X and R, advocates of a dual belief system but practitioners of multiple beliefs.** X defined English reading as “a way to obtain information, entertainment or wisdom through visual capability in the language of English.” Information-seeking and processing were two of the primary functions he noted for English reading.

**X’s reading beliefs.** Moreover, acquisition of entertainment and wisdom through language was also important. While emphasizing information-seeking and processing indicated cognitivist reading beliefs, appreciation of language in an entertaining way indicated a constructivist orientation. In other words, both cognitivist and constructivist orientations were indicated in her stated beliefs about reading and teaching reading. Other excerpts further indicated mixed orientations. For example, when asked to define “what is
good English reading?” X answered that “(i)t means a non-native speaker has the ability to understand the meaning of an article efficiently and form some mental exchange with the author.” Apart from the textual understanding that indicated a cognitivist orientation, a mental exchange between reader and writer that indicated the constructivist orientation was also present.

When asked what makes a good reader, X stated that interest or intrinsic motivation shaped a great reader and even made one “excel” in his/her field. The way she interpreted a good reader indicated a constructivist view about English reading. She believed affective factors rather than repeated behaviors contributed to a great reader. X’s constructivist beliefs were also indicated when explaining what strategies a good reader might use to solve problems he/she meets when reading a text. She believed that a good reader may utilize resources such as the internet, dictionary, or relevant persons to solve those problems. These resources acted as different mediators in helping the reader determine how he/she can solve the problems. Learning mediators are an embodiment of sociocultural theories (Vygotsky, 1978). Researchers (e.g., Lantolf, 2000; Stanovich, 1980) posited that learners construct meanings of the world by communicating with different mediators.

**X’s beliefs about reading instruction.** In terms of stated beliefs about teaching reading, X indicated a preference for constructivist methods. The strong influence of affective factors suggested to her that comforting students while providing advice was useful for their development of critical reading skills.
In written responses on how as a teacher she can help readers to enhance their reading ability or solve problems they encounter while reading, X classified students into different groups and gave them different strategies on how they could improve their abilities and reading skills. This method of differentiating students and giving different groups different strategies is an indicator that X leaned towards a constructivist orientation.

However, X indicated a cognitivist orientation when asked to explain reading instruction. For example, apart from student differentiation strategies, X also believed that helping students to “analyze the structure of the long sentences” and “find out the organization of an article” was important.

**X’s methods in actual practice.** While X stated both cognitivist and constructivist beliefs in her written responses to survey questions, most of the instructional methods used in her class were behavioristic. For example, she frequently used methods like reading aloud, paraphrasing, word formation, and pattern drills. More specifically, X asked her students to read aloud every paragraph of the text before providing further instruction. She also led students to read aloud each new word with her from a word list. She also used dictation as a way to examine her students’ memorization of words. The following excerpt is selected from the transcription of her observation, which indicated her behavioristic way of teaching reading:

This is such a structure, and it can be used in adverbial. This is exactly in this case.

In this article, you can find a lot of such kind of structure. The second sentence is “he knows her heart but has never seen her.” His interest began 12 months ago in
a Florida library. If we write this sentence, it always begins with “he began to be
interested in the girl with a rose.” When you are writing, you can’t always use the
personal pronoun as the subject. It is too boring. In your homework, the beginning
is always “I, I, I.” So, this sentence is very flexible. The next sentence (Inaudible).
In this sentence, pay attention firstly to (Inaudible). The “find” can be followed by
the reflexive pronoun, like “yourself.” It can be added many elements. The first
one is find yourself plus past participle. It can also be present participle like red
words in the introduction part. The adjective is okay. The prepositional phrase is
allowed. For example, “I found myself involved in such a scandal.” Anyway, it is
“find yourself” plus past participle. Or “I found myself sleeping in the English
class.” And “I found myself unable to follow the English teacher.” It is the
adjective. When he is awake, “he found himself in the hospital.” It is the
prepositional phrase. Anyway, “find yourself” can plus many different elements.
The second sentence is “completely absorb my attention.” It means to attract
somebody completely.

The above excerpt indicated X’s behavioristic orientation of teaching in a number of
ways. First, X taught the paragraph in a decoding way, and chopped the text into
sentences. Second, she focused on teaching grammatical components or language units in
the text, e.g., the adverb, adjective, and prepositional clause. In addition, X broke down
almost every sentence to students to increase their understanding. Individually and
collectively, these methods indicated a behaviorist orientation.
X used some cognitivist and constructivist ways to teach reading in her class, albeit infrequently. For example, when she started teaching a unit about love, she designed a warm-up activity by asking students to name three merits that their Mr./Mrs. Right in the future should possess. Then, she asked two volunteer students to write down all the students’ responses on the blackboard and analyze the data into three top merits. Through this activity, students were able to summarize and learn many adjectives that are used to describe a person’s characteristics and features. Students associated their real-world experience with the topic and then began learning the new text, which was a more constructivist approach.

**R’s reading beliefs.** Similar to X, R also held mixed beliefs about reading and teaching reading. R believed reading was a process used to find the information a person is interested in. Both information seeking (Gough, 1972) and mental development (Goodman, 1967; 1986) were indicated in her stated beliefs, which indicated both behavioristic and constructivist reading orientations. When asked to define what English reading is, R stated:

> English reading to me means a lot: primarily, it means to *find the information* I’m interested in from the reading materials; it also means a way to *broaden my horizons*, *cultivate my taste* and *makes me pleased and relaxed*.

R’s answer to the question includes two key pieces of information. First, she believed that reading was a way to *collect* and *process* information (Goodman, 1967). This indicated a *cognitivist orientation*. Second, R believed that mental development and pleasure also are important results of reading, which is constructivist in nature.
Then, R explained what a good reader is: “A good reader can fully understand the author’s intention of writing; appreciate the beauty of original works; read as much as possible.” This definition indicated a mixed-belief system—a cognitivist focus on author meaning and a constructivist goal of appreciation and intrinsic motivation. Specifically, she believed that constructing text meaning by communicating with the author was the primary way to define a good reader. This indicated a constructivist view (Stanovich, 1980; Zainal, 2003). R also believed that affective factors, including the appreciation of the text and the motivation to read extensively, were also qualities (traditionally tied to constructivism) that a great reader should have.

When asked to provide an example of a good reader in her actual life, R stated that one of her colleagues was a professor of English in her department and he was a great reader in her mind. She explained, “he has good command of English and he is interested in English literature . . . he is knowledgeable and he enjoys extensive reading of books of different kinds.” R held a dual reading belief system, according to her stated beliefs. The constructivist beliefs were core beliefs and cognitivist beliefs were the peripheral beliefs.

**R’s beliefs about reading instruction.** When asked about ways to solve problems students encountered in reading, R stated that a combination of “search[ing] for the relevant background knowledge on the Internet,” “communicating with the author,” and/or “consulting the professionals in this area” were great ways to address problems. R tended to solve problems through different mediators (books/internet, peers, and professors), a tendency embodying the sociocultural theory (Lantolf, 2000).
Her constructivist beliefs about teaching reading were also indicated in her responses to what might be the best strategies to teach reading. Overall, R liked to differentiate students and give them different reading strategies. The way she organized her answers indicated a constructivist orientation.

First, to find out his/her problems; for the problem concerning vocabulary, tell the student to consult the dictionary or try to guess its meaning in the context; for the problem concerning grammar, advise the student to practice more on the basic learning. For difficult articles, raise some questions concerning to the reading, let students read with these questions; for easy articles, organize the discussion after reading, discuss about the uncertain places so that students can fully understand the reading material.

R believed that classifying students, problems, and reading materials was the first step in determining strategies. She believed that different reading assignments and strategies should be given to different students. R used “guiding questions, peer discussion, and checking through dictionary, all those constructivist methods should be mingled together into the remedy [for] students’ reading problems.” R’s answer indicated a constructivist view of how reading instruction should be conducted.

Her constructivist beliefs about reading instruction were also indicated in her answer to “what might be great reading instruction?” R stated:

1. Pay more attention to the interaction with students, discuss with the students
2. Help students with the understanding of the long and difficult sentences
3. Introduce the background knowledge about the American and British
culture, writing features of western people; instill such ideas constantly
when teaching.

R also believed that interaction, peer discussion, and cultural context were important
in reading instruction. Her stated beliefs indicated a constructivist orientation. She
highlighted the notion that meaning and learning were constructed through peer
interaction and discussion (Lantolf, 2000; Vygotsky, 1978; Zainal, 2003).

R also showed a cognitivist view in her ideas about reading with students. For
example, she believed that reading instruction should “make students fully understand
the reading materials,” and “have a better understanding of the writing purpose and
writing techniques of western people.” She focused on reading comprehension and
culture in teaching. In terms of why she thought teaching culture was helpful to
students’ comprehension, she stated: “when reading similar articles next time,
students can accept the idea more easily.”

R’s methods in actual practice. R used instructional methods that indicated a
behavioristic orientation more so than the other two orientations, though all three
made an appearance. R used four methods in her class: 1) grammar knowledge
instruction, such as the attributive clause and adverbial clause; 2) sentence-making
method, e.g., when she asked students to make sentences with the given words or
phrases; 3) translation, e.g., when she guided students to translate words or sentences
from Chinese to English and vice versa; and 4) word formation, such as how she
taught students to divide a word into constituent morphemes. She used cognitivist and constructivist methods in her class less frequently.

R was the only teacher observed teaching phonics. For example, when she emphasized spelling, she often articulated the relevant phonemes:

There are two “s”s in the word profession. Some students just write one. And professional. The later one is “sense,” but some students wrote “professionals.” The two are wrong. They are profession, professional and sense. Another one word that you just miss one letter is “impression.”

In order to help students memorize those words, R highlighted some spelling mistakes students typically made when writing. The letter-word structure indicated a decoding and phonics way of teaching reading, focusing on language cues or phonemes (Gough, 1972; DeFord, 1978). This is consistent with the behaviorist orientation.

Outside of grammar and spelling, R used a holistic teaching approach to teaching in her class. She liked to analyze the whole structure of the text she was teaching and guide students to guess or infer meanings of certain sentences or paragraphs. For example,

Okay, now we see the article. We don’t see the picture. Let’s look at the passage. The first part is the first paragraph. What does the author tell us here? It’s the hero of the story — John (Inaudible). He was a soldier. How can we tell? He was in army uniform…

From paragraph two to paragraph six is the second part. What does this part introduce? It’s about how these two people know each other and love each other.
John has fallen in love with Mrs. (Inaudible). It introduces the process — how to meet and love each other.

Paragraph two, he knew this girl whose heart (Inaudible) but whose face he didn’t. The girl is with a rose. The girl is very good. How to say a heart like the gold?

Her analysis of the structure of the text indicated a constructivist orientation, focused on the meaning and message the author was trying to convey. She also used many guiding questions in teaching. She viewed herself as a facilitator, rather than simply as an instructor. Also, the way she analyzed the text structure indicated a cognitivist orientation. She saw the whole structure of the text as a schema, and taught students to pay attention to the structure. In addition, R also indicated the cognitivist view in her practice, as in the following:

Soul has two meanings: one is the soul and the other is human. It is totally silent and dead, there may be no a single soul on the street. Thoughtful means careful and kind. Her heart is careful and kind. If we say somebody is of great insight, we mean that somebody can observe deeply. It’s during the Second World War when women played all kinds of character. Have you ever seen the movies of Marilyn Monroe? She usually plays the role with beautiful blonde and act like a vase. She doesn’t have much intelligence. But here the lady is insightful. So, we should value people’s mind instead of appearance. Do you know anything about Marilyn Monroe? You know a little about the movie star.

R taught students to differentiate literal meanings from connotative meanings of a single word (vase, soul, etc.). She held a behavioristic orientation in this method. She also
introduced some relevant cultural knowledge or background information of the paragraph in order to better student understanding of the content, all of which were cognitivist in nature. Above all, R indicated a multiple reading belief system in actual practice. She indicated all three reading orientations in her practice.

**Mismatch between beliefs and actual practices.** For both X and R, their stated beliefs about reading and teaching reading were inconsistent with their actual practices. While they held a dual belief system that consisted of only behavioristic and constructivist orientations, they taught in a way that combined all three reading beliefs. Compared with X, R used more behavioristic instructional methods, such as word formation and translation. X, while having used methods that represented cognitivist and constructivist orientation, used more behavioristic methods.

The stated survey responses and classroom observations indicated that X and R alone showed more theoretical orientations in their actual practice than in their stated survey responses. The other teachers showed less theoretical orientations in their actual practice than in their responses.

**Cross-case Analysis**

In addition to within-case, a cross-case analysis was also conducted. The purpose of the cross-case analysis was to investigate similarities and differences among stated beliefs about reading, beliefs about teaching reading, and actual practices across four case groups (see Table 15).
Table 15

Qualitative analysis data on stated beliefs and actual practices

<table>
<thead>
<tr>
<th>Case</th>
<th>Participant</th>
<th>Age</th>
<th>Gender</th>
<th>Reading Beliefs</th>
<th>Teaching Beliefs</th>
<th>Actual Practice</th>
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<td>Dual</td>
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<td>M</td>
<td>Dual</td>
<td>Beh Cog</td>
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<td>D</td>
<td>34</td>
<td>F</td>
<td>Dual</td>
<td>Beh Cog</td>
<td>Dual</td>
</tr>
<tr>
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<td>S*</td>
<td>48</td>
<td>M</td>
<td>Multiple</td>
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<td>Multiple</td>
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<td></td>
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<td>38</td>
<td>F</td>
<td>Dual</td>
<td>Cog Con(C)</td>
<td>Dual</td>
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<tr>
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<td>X*</td>
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<td>F</td>
<td>Dual</td>
<td>Cog Con</td>
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<td></td>
<td>R</td>
<td>45</td>
<td>F</td>
<td>Dual</td>
<td>Cog(P) Con(C)</td>
<td>Dual</td>
</tr>
</tbody>
</table>

a. TO: theoretical orientations,
b. all theoretical orientations are abbreviated to the first three letters.
c. C: core beliefs; P: peripheral beliefs
d. *: teacher team leader
Stated beliefs: Similarities vs. differences. The observed teachers showed certain notable similarities and differences in terms of their stated beliefs in the survey responses.

Similarities. Three similarities about the participants’ stated beliefs were indicated in the cross-case analysis. First, each of the three sub-belief systems coexisted with at least one other within the belief structures stated and observed in participants. Classroom observations from all the selected case study groups indicated a coexistence among the three reading orientations. However, the distribution among the orientations was uneven; each teacher demonstrated behavioristic methods in their practice, but not in every teacher’s beliefs. These qualitative findings corresponded to the quantitative result.

To expand on this overlap, few of the observed teachers indicated a dominant reading belief model in their stated responses. Most teachers held a dual belief system. For example, Y and D both held dual belief systems about reading that included behavioristic and cognitivist orientations. Their dual, stated beliefs about reading were then mirrored in their beliefs about teaching reading. L and S held multiple belief systems that indicated all three theoretical orientations. Their stated multiple-beliefs about reading consistently acted on their beliefs about teaching reading. While LY’s stated beliefs about reading were not consistently reflected in her responses about reading instruction, she still indicated dual beliefs in her written responses to both types of questions. Her beliefs about reading showed the cognitivist and constructivist orientations, whereas her beliefs about teaching reading were behavioristic and constructivist. Finally, X and R both held mixed reading beliefs that consisted of both behavioristic and constructivist
orientations. Those mixed reading beliefs were consistently reflected in their stated responses to both reading and reading teaching questions. All in all, findings of the written survey responses indicated dual, multiple, and mixed beliefs about reading and reading instruction across all four cases. Instead of holding a dominant, single belief system, all teachers held at least two types of beliefs in their stated responses.

The second key similarity between the teachers within the case studies was that they all indicated cognitivist reading beliefs. In contrast with the quantitative findings—in which the 96 teachers in their stated responses expressed behavioristic reading beliefs more often than the other two reading beliefs—teachers in the selected cases all exhibited cognitivist paradigms in their stated beliefs about reading and reading teaching.

Some of the selected participants in fact held core cognitivist beliefs. For example, while L and S held multiple belief systems that included all three theoretical orientations, they both regarded the cognitivist beliefs as most important. In contrast, the other teachers also held cognitivist beliefs, but they viewed them as peripheral. Regardless, all of the qualitative participants uniformly held cognitivist beliefs in their stated belief systems. Cognitivist beliefs that focused on comprehension or understanding of certain text concepts, cultural knowledge, and reading skills were reflected in each of their stated responses to varying degrees.

Finally, all teachers held the same belief systems between reading beliefs and teaching reading beliefs. In Cases 1, 3, and 4, teachers held dual-belief systems, whereas S & L in Case 2 held multiple-belief systems (see Table 15).
In addition, in most cases this consistency carried over into their classification of core or peripheral beliefs. For example, the behavioristic and cognitivist perspectives were core beliefs in S’s stated responses about defining reading, while the constructivist beliefs were relatively peripheral. That core-and-peripheral relationship was transferred to S’s stated beliefs about teaching reading. R is another example. Her belief system was built on cognitivist and constructivist orientations—in which the former was peripheral and the latter was core. This was indicated in both her stated beliefs about reading and her responses about teaching reading.

**Differences.** Differences between cases in terms of teachers’ beliefs about reading and reading instruction were also indicated. First, while most participants in the qualitative part made connections between how they perceived reading and how they believed that reading instruction should be taught, there was still an exceptional case (LY) in which a teacher contradicted her beliefs about reading and teaching reading. Instead of the multiple belief system shown in her reading beliefs, she displayed a dual belief system in her stated beliefs about teaching reading. As for the other three cases, regardless of the number and categories of theoretical orientations in their stated beliefs about reading and teaching reading, they indicated a consistency between the two belief systems.

In addition, as what had been reported in the quantitative findings, teachers held different, mixed beliefs. Specifically, teachers across all four cases differed from each case in terms of their belief systems and theoretical orientations. For example, S and Y in case 2 held a multiple belief system including all three theoretical orientations, whereas Y
and D in case 1 held a dual belief system which included behavioristic and cognitivist theoretical orientations. The qualitative, cross-case analysis confirmed this quantitative finding.

**Actual practices: Similarities vs. differences.** Unlike the similarities and differences reflected in stated beliefs, which were mostly classified by theoretical orientations, similarities and differences in actual practices were primarily analyzed in terms of the instructional methods used, which embodied different theories.

**Similarities.** Classroom observation indicated similarities among case groups, especially for teachers who taught in a behavioristic orientation. First, all teachers’ instruction used behavioristic methods, although not all teachers regarded the behavioristic orientation as their core orientation (see Table 15). Case 1 used more decoding methods than the other teachers. These teachers taught reading primarily as an analysis of words and phrases. Typical teaching methods expressed in their stated teaching beliefs included direct/rote instruction, translation, decoding, word formation rules, focus-on-form approach, etc. Similarly, Case 2 also used phonics or decoding methods in actual practices. While other groups used fewer behavioristic methods than they did other methods in either cognitivist or constructivist orientation, they all used behavioristic methods in their actual practice.

Second, within the broad scope of behavioristic instruction, teachers frequently used similar instructional methods, including reading aloud, translation, word dictation, and sentence-making. All these were consistent with decoding and behavioristic orientations. For example, both Y and D used word-formation methods in their
instruction. L and X, though not in the same group, both used word dictation as a way to evaluate vocabulary comprehension among students. LY and R used pattern drill practice and sentence-making activities in their instruction.

The similarities between methods used by different teachers in different cases were similar was only true for methods falling under the behaviorist umbrella. For example, the instructional methods based on a constructivist orientation led teachers to design different activities with multimodal mediators involved. Generally, methods in the constructivist orientation were more diversified and flexible than the behavioristic methods. The cognitivist orientation, being focused on individual differences, was also less likely to lead to similar classroom practices.

Third, multiple theoretical orientations were reflected in teachers’ actual practices. Apart from the finding that all teachers used behavioristic methods in their actual practices, another similarity was that they all used methods representing dual or multiple orientations, instead of a single, dominant orientation in their classroom instruction. For example, LY, X, and R all had a multiple-belief system guiding their actual practice. That is, the behavioristic, cognitivist, and constructivist orientations were all reflected in their classroom instruction. Teachers in Cases 1 and 2 all held dual belief systems informing their classroom instruction. However, the expressed core and peripheral beliefs differed, and each of the paradigms were adopted at different frequencies by the observed teachers (see Table 15). For example, though they all held dual beliefs, Y and D showed behavioristic and cognitivist beliefs in their actual teaching, whereas L and S held behavioristic and constructivist beliefs in their instruction.
**Differences.** Classroom observations also indicated differences in teachers’ actual practices across the cases. Those differences were analyzed from three perspectives: instructional focus, classroom interaction, and instructional content.

*Instructional focus* Teachers in the behavioristic reading orientation tended to provide students with rote instruction, which is typically test-based. College English test (CET) is the largest national English language test in China. It tests students’ English language proficiency. Because CET is a required test for most universities, it may explain why the participants in this study taught test-taking skills in their class. Five methods frequently utilized during their lessons included reading aloud, pattern drill practice, translation, dictation, and sentence-making. Some teachers, e.g., R and Y, specifically emphasized test-taking skills in their actual practice. R, X, and Y spent approximately 15 to 20 minutes teaching students how to choose correct answers from multiple choice options, or how to guess the meaning of unknown words in context. They also taught students specific vocabulary from the test word-list in class. In a typical test-based classroom, rote instruction with few activities or tasks is the predominant method. Students take their notes quietly while their teachers instruct. In behaviorist classes with a test-taking emphasis, minimal peer discussion or feedback was observed.

In contrast to teachers with a behavioristic reading orientation, teachers with a cognitivist reading orientation tended to use methods like close or text structure analysis in their classrooms. As cognitivist reading orientation focuses on comprehension, teachers would often check students’ understanding of every individual sentence or phrase. Also, as cognitivist reading orientation focuses on the whole text, teachers with
this orientation seemed to ask students to see the overall structure of the text first and then move down to understand detailed words or phrases. Also, teachers were observed frequently checking students’ understanding of the words, sentences, or texts while providing regular feedback.

In contrast to behavioristic and cognitivist reading orientations, teachers in the constructivist orientation used more tasks than rote instruction. For example, when teaching a new lesson about personalities, X started the lesson with a warm-up activity asking students about their ideal traits in a romantic partner. Instead of directly teaching the vocabulary, X used guiding activities as a means to encourage students to think about the words used to describe a person’s qualities. Y asked her students to pair with each other and talk about their real-life experiences to understand a specific concept. By doing so, she guided the students to construct meanings of specific concepts. Through these observations, it became clear that in constructivist classrooms, task-based instruction as the primary means of understanding text or concept meanings was often used.

In sum, a continuum of tasks and teacher-student interactions among the classrooms based on three different reading orientations were indicated, with no orientation emerging as the clear dominating methodology. In terms of the task types and interaction frequencies, in classrooms based on the behavioristic reading orientation, teachers conducted few tasks or activities and seldom interacted directly with students. The most frequently used tasks in this type of classroom were translation and sentence-making activities. This kind of classroom stands on one extreme of the continuum. Then, in the middle of the continuum are the classrooms based on the cognitivist reading
orientation. This orientation equipped teachers with relatively more tasks and more feedback for the students. At the opposite end of the continuum stands the constructivism-based classroom, where teaching is primarily task-based and interactions among students and teacher are key.

**Classroom interaction.** Similar to the task continuum, there was a continuum of teacher-student interactions among the classrooms based on the three different reading orientations. The way teachers interacted with students seemed to indicate which theoretical orientations they believed in.

For example, some teachers (e.g., Y and D) had more interactions with their students. Classroom observations indicated that Y and D interacted with students on a regular basis in their class. Their interaction was often used as a means to check whether students had understood a certain word or concept. This focus on understanding or comprehension of a certain concept indicated a cognitivist orientation.

LY did not interact with students as frequently as Y and D did. However, the way she interacted with students was identical to the style used by Y and D—she used interaction to check students’ understanding of a certain word or concept.

Conversely, S and R seldom interacted with students in their classes, instead using direct or rote instruction in class. L and X also did not interact with students very often, but left time for students to do class activities. Classroom observations yielded the finding that teachers who used less interaction and more rote instruction indicated their stated beliefs to be in the behavioristic orientation. In contrast, teachers who left more time for student activities indicated the constructivist orientation.
Teaching content. Classroom observation indicated differences among the selected groups in the content they preferred to teach in their classes. For example, linguistic knowledge like grammar, vocabulary, and text structure was often taught in behavioristic classroom environments. Pragmatic or language-association knowledge, such as background knowledge, cultural content, or association with real-world problems, indicated the cognitivist and constructivist orientations.

Classroom observations indicated many differences between the various teachers with regards to their content focus and theoretical orientations in the classroom. For example, D taught vocabulary and grammar that related to language knowledge and competence. Both Y and D taught smaller linguistic units, such as grammar, words, and sentence structures, which indicated a behavioristic orientation. In addition, these behaviorist language teachers believed in repeating and rephrasing what students have learned, and they often asked students to repeat sentences aloud. Language learning in this orientation seemed to be mechanical, and closely associated with repetition and association.

In contrast, LY and S focused on teaching the background or cultural knowledge of a text and designed activities through which students internalized their learning of the text. This related to language performance, which highlights the importance of constructing meaning through activities. As cognitivist and constructivist practitioners, those teachers stated beliefs that learning is a change in individuals’ mental structures, enabling them to show changes in behavior. Their focus was on what is in the learner’s head, coupled with the student’s behavior. Therefore, their instructional methods were
typically focused on association between knowledge learning and the knowledge learned. Triggers were used to activate what their students have learned and combine the learned knowledge with the text they were required to read in class. For example, cultural books were frequently used by cognitivist-oriented teachers. The teachers’ instruction focused on language association instead of language itself.

**Summary**

In this chapter I described the findings of the study in connection with the three research questions. The following are findings were observed. Three theoretical orientations, i.e., behaviorism, cognitivism, and constructivism, were reported to coexist in Chinese EFL teachers’ belief systems. In addition, three distinct reading belief systems were identified: dominant, dual, and multiple belief systems.

For the quantitative part, I provided descriptive statistical analysis for the three belief systems. Statistical results indicated that teachers holding the behavioristic orientation outnumbered the other two theoretical orientations. The study also found that more teachers held a dual belief system than a dominant or a multiple system. All these findings indicated a complex, inconsistent Chinese EFL teachers’ belief system.

I also described statistical results that indicated inconsistencies between teachers’ stated reading beliefs and their stated beliefs on teaching reading. In terms of the behavioristic and the cognitivist theoretical orientations, teachers’ reading beliefs were not associated or consistent with their teaching beliefs. As for the constructivist orientation, there was more consistency between teachers’ reading beliefs and their teaching beliefs; a slight association between the two beliefs systems was indicated.
For the qualitative part, I summarized and described the inconsistencies of belief and practice among the seven teachers who were selected and observed in their classrooms. Among them, only two, Y and D, practiced the same orientation in the classroom that they had identified in the survey. Other teachers exhibited some inconsistencies between their stated beliefs and actual practices.
CHAPTER V
DISCUSSION AND IMPLICATIONS

Overview of the Chapter

In this chapter, I discuss findings of the study based on three primary research questions. I provide a review of the three research questions, as well as key findings under each, as a means to understand this discussion and implications chapter. Three research questions guided this study:

1. What are the characteristics of the Chinese EFL teachers’ beliefs about English reading and reading instruction?

2. Are the Chinese EFL teachers’ stated beliefs about English reading consistently indicated in their stated beliefs about teaching reading?

3. Are the Chinese EFL teachers’ beliefs about reading and teaching reading consistently indicated in their actual practices?

The first question investigated the characteristics of the Chinese EFL teachers’ stated beliefs about English reading and reading instruction. Findings indicated that complexity was the primary feature of the belief system. Specifically, three major theoretical orientations (behaviorism, cognitivism, and constructivism) were matrixed with three types of belief systems, or sub-beliefs (dominant, dual, and multiple beliefs). This multi-layered matrix made the belief system complex. Under the complex matrix, quantitative findings of the study further indicated that there were more complex relationships among beliefs within a specific theoretical orientation and across different
orientations. Discussion on only one research question may not provide a holistic picture for the characteristics of the belief system. Therefore, some of these complex relationships within the belief system were explained through discussions on research questions two and three.

The second research question investigated whether Chinese EFL teachers’ stated beliefs about English reading were consistently indicated in their stated beliefs about teaching reading. Quantitative findings from this study indicated that there was a statistically significant association between reading beliefs and teaching beliefs only in the constructivist orientation ($p < .05$). However, the association was not statistically strong ($\phi = .060, p < .05$). On the other hand, there was no statistical association between reading beliefs and teaching beliefs in neither behavioristic nor cognitivist orientations. The inconsistent, non-linear relationships between reading beliefs and teaching reading beliefs made the belief system even more complex.

The third question investigated whether Chinese EFL teachers’ beliefs about reading and teaching reading were consistently indicated in their actual practices in the classroom. Findings from both within- and cross-case studies in the qualitative part indicated that both consistencies and inconsistencies existed between teachers’ stated beliefs and actual practices. For example, only two participants, in my observations, practiced the same orientations in the classroom that they had identified in the survey, but many participants had areas of overlap. Findings of the discrepancies within different cases yielded a complex, non-linear relationship between beliefs and practice.
Discussions on the three research questions also worked as a whole to describe and explain the complex, non-linear, and unpredictable characteristics of the belief system.

**Characteristics of Chinese EFL Teachers’ Stated Beliefs about English Reading and Teaching Reading**

With respect to research question number one, findings indicated that multiple reading orientations coexisted in these Chinese EFL teacher’s belief system. As explained in Chapter IV, a dominant reading belief system represents only one theoretical orientation. A dual belief system stands for the mixture of two theoretical orientations of reading. A matrix with the three potential pairs of dual theoretical orientations was indicated in the study: behaviorism and cognitivism (1 & 2); cognitivism and constructivism (2 & 3); and behaviorism and constructivism (1 & 3). A multiple beliefs system includes all three theoretical orientations.

In this study, instead of holding a single, unique orientation, most teachers surveyed in the study indicated multiple and diverse reading and teaching orientations. Multiple orientations made the belief system complex. Quantitative findings indicated that, no matter in reading beliefs or teaching reading beliefs, any orientation was different from the others in its percentage. There was no even distribution among the three reading belief systems or theoretical orientations. For example, teachers with a dominant, constructivist reading orientation accounted for only 3.9%, whereas teachers holding a dominant, behavioristic reading orientation (the most common in the study) accounted for only 18.1%. Another example is teachers holding a dual reading belief system accounted
for 38.8 % of the whole sample for reading beliefs, whereas teachers holding a multiple reading belief system accounted for only 11.1%.

Likewise, qualitative findings indicated that teachers in different cases held different reading and teaching belief systems. In this study, teachers Y, D, X, R, and LY all held a dual belief system, whereas S and L held a multiple belief system. Each system may consist of different orientations leading to different beliefs. This finding is consistent with findings from previous studies. For example, in a case study of comparing beliefs and practices between one novice and one experienced ESL teacher, Farrell and Bennis (2013) showed the complexity of teacher belief systems, and stated that “teachers may have many competing beliefs in play at any one time” (p. 163). Zheng (2013) also found the co-existence of different types of beliefs made the belief system complex.

In addition to the complex co-existence of different theoretical orientations, findings of the study indicated that relationships among different beliefs were non-linear and unpredictable. Specifically, two kinds of unpredictabilities occurred in the study. The first unpredictability occurred in belief systems. Specifically, occurrence of a specific belief system in the stated beliefs did not necessarily indicate its occurrence in the actual practice. For example, S and L were advocates of multiple reading beliefs in their survey responses but then practitioners of a dual belief system in their actual practices. The second unpredictability occurred in theoretical orientations. Specifically, statistical percentages of a certain belief system did not necessarily indicate similar percentages of the belief system in teaching, and vice versa. For example, the largest percentage in
reading beliefs was the dual belief system (38.8%), whereas the largest percentage in teaching reading beliefs was the single, behavioristic belief system (37.8%).

Likewise, qualitative findings indicated that having one orientation in reading and teaching beliefs was not a significant predictor of which orientation the teacher might hold in actual practice. For example, both S and L held cognitivist reading and teaching beliefs in their survey responses. However, they did not indicate the cognitivist orientation in their actual practices.

The non-linear, unpredictable relationship then made the participants’ teacher belief systems even more complex. This finding was similar to study findings regarding teachers’ stated beliefs about teaching reading (Borg & Phipps, 2009; Pajares, 1992; Skott, 2001). By joining the existing literature, this research has also provided hypothetical, empirical, and theoretical explanations for this complex phenomenon.

Basturkmen (2012) offered one hypothetical explanation for the diversity of belief systems held among teachers: their different educational and professional backgrounds and/or teaching experiences. She stated that “more experienced teachers are likely to have more experientially informed beliefs than relative novices, and principles or beliefs informed by teaching experiences might be expected to correspond clearly with teaching practices” (Basturkmen, 2012, p. 288). This idea was not mirrored in the current study, as the emerging young teachers, Y and D in Case Study 1, had the most consistency in beliefs of everyone in the group.

Senior (2006) offered another hypothesis. After investigating teachers’ decision-making abilities in their classrooms, Senior (2006) hypothesized that teachers appeared to
hold different/contradictory belief systems because their abilities to articulate or state
their beliefs about reading varied from person to person. In some ways findings in this
study confirmed this hypothesis. Some Chinese EFL teachers spoke more than others in
describing or explaining what they believed to be “good” reading or readers. For example,
Y’s stated responses to the survey questions contained richer information on how he
thought about reading and teaching reading. Similar to Y, L stated her beliefs about
reading and reading instruction in more details than the other teachers on the survey.
Both relied on examples, hypothetical teaching practices, and philosophical statements to
make their points clear.

Other studies have offered yet another hypothesis from the perspective of teacher
reflection. For example, Gatbonton (2008) found that novice or inexperienced teachers
were less likely to reflect on their instructions, as they might spend more time planning or
designing lesson plans. In addition, Farrell (1999) hypothesized that the varied beliefs
about reading among different teachers might also be related to the frequency or quality
of the teachers’ reflections. While the study was not able to explore how much reflection
each teacher had made through survey data and classroom observations, it will present
why reflection is important in solving the tensions between beliefs and practices in the
last section of the chapter.

Moving beyond the hypotheses, scholars proposed different theories to explain
the dynamic, unpredictable nature of belief systems. For example, the theory of action
(e.g., Li, 2013) and chaos theory (e.g., Zheng, 2013) are both attempts to account for why
a belief system is dynamic and complex. For example, Li (2013), from the theory-of-
action perspective, found that “no strict one-to-one correspondence” but a complex relationship existed between beliefs and practices (p. 175). The theory-of-action perspective links humans’ thoughts with their actions, and indicates that humans’ behaviors respond to context. Contextual influence is thus key to explaining the complex relationships found in both that and the current research.

Zheng (2013), from the chaos theory perspective, used a case study in a Chinese secondary school to explore features of teacher belief systems and how different types of beliefs interacted to inform teacher practice. The chaos theory is a great fit to study systems, teachers’ belief systems included, that are “produced by a set of components that interact in particular ways to produce some overall state or form at a particular point in time” (Larsen-Freeman & Cameron, 2008, p. 26). Zheng’s study confirmed the complex, non-linear features of the belief system and suggested an eclectic approach including ideas from several perspectives as a way to ease the tensions between teachers’ beliefs and practices. Findings of the present study, particularly the diversity in practices, held with that idea.

A final finding in this study regarding teacher’s stated beliefs was that while the largest group of teachers held a behavioristic belief, the percentage of teachers holding a dominant constructivist orientation was larger than that of the teachers holding the dominant cognitivist orientation. Previous studies (e.g., Johnson, 1992; Kirkgoz, 2008) found that the temporary innovations in language teaching affect teachers to form their dominant beliefs. For example, Johnson (1992) found that the dominance of the function-based theoretical orientation at the time when she was doing the research represented the
overwhelming popularity of the approach among ESL teachers in her study. The recent push to implement constructivist practices in education reform (Henson, 2015) may account for part of that philosophies dominance.

**Teachers’ Stated Beliefs about English Reading and Teaching Reading**

With respect to research question two, the quantitative findings indicated that there was no significant association between reading beliefs and teaching beliefs in teachers holding behavioristic or cognitivist theoretical orientations. This again confirmed the unpredictable feature of the beliefs system. As evidenced by their survey responses, while many teachers held the behavioristic or cognitivist reading beliefs, they may not necessarily hold the same level of behavioristic or cognitivist teaching beliefs.

However, the findings indicated a significant association between teaching beliefs and reading beliefs in those with a constructivist theoretical orientation. In other words, the quantitative findings indicated that teachers who held constructivist reading beliefs were more likely to also hold constructivist teaching beliefs.

One reasonable explanation for the consistency between reading beliefs and teaching beliefs in one orientation is that constructivist theoretical orientation is the most updated theoretical orientation of the three; that is, it has been the subject of the most frequent and current research. Through comparing critical features of the three theoretical orientations, Ertmer and Newby (2013) mapped out how theoretical orientation developed from the behaviorism (around 1950) to the cognitivism (in late 1950s), and then to the constructivism (around 1990s). Compared to behaviorism and cognitivism, constructivism is relatively a newer and fresher theoretical orientation and focuses more
on how learners construct the meaning through their own experiences. As the most
advanced orientation, teachers who read about constructivism or were trained in it had a
better and fresher understanding. This fresher experience with constructivism may
empower teachers to try new teaching methods derived from that theoretical orientation.
Some teacher training programs even advocated for methodological innovation by putting
the updated orientation into practice in their own classes. Previous studies (e.g., Johnson,
1992; Kirkgoz, 2008) found that even temporary innovations in language teaching affect
teachers formations of dominant beliefs. Temporary innovation refers to the
methodological innovation in reading instruction derived from an emerging theory at a
specific time. For example, when constructivist theory emerged, a lot of new instructional
methods were developed at the same time including communicative language learning,
task-based learning, and cooperative language learning. Also, some approaches that had
been developed even in behavioristic and cognitivist orientations, may also be redefined
in a constructivist way. As mentioned earlier in the study, teachers used the same
instructional approach may have different theoretical orientations. It depends on how
teachers would like to use the approach and what kinds of guiding principles are behind
the approach. For example, a task-based learning approach can be either behavioristic or
constructivist. In this study, if a teacher gave a student a task to repeat reading a certain
reading text as a way to improve his/her reading fluency, he/she used a behavioristic
approach. However, if a teacher gave a student a task to role play a story by showing how
he/she understands the text, he/she used a constructivist approach. No matter whether it
was a newly developed approach or a redefined approach, teachers deliberated to align their beliefs with their practices in temporary innovation era.

Another reasonable explanation for the consistency between reading beliefs and teaching beliefs in teachers with the constructivist viewpoint is that those teachers favored and truly believed in the constructivist theoretical orientation. Gutierrez Almarza (1996) found that student teachers at the University of London were taught a specific teaching method during their practicum. However, unless they truly believed in the method, they would not stick to it for long. In other words, only when teachers truly believed in a method would they keep using it. Almarza’s findings provide insight in explaining why teachers in the current study had consistent reading beliefs and teaching beliefs in the constructivist theoretical orientation, but inconsistency in the other two orientations. While their responses in the survey indicated more behavioristic and cognitivist beliefs, they might not truly believe that teaching reading in behavioristic and cognitivist orientations would be more effective than teaching reading in a constructivist orientation.

While the quantitative findings did not indicate any association between reading beliefs and teaching beliefs in the behavioristic and cognitivist orientations, the qualitative data in the study indicated something different: how teachers defined reading was largely consistent with how they defined teaching reading. Specifically, except for LY, the other six teachers indicated consistencies between their stated beliefs about reading and stated beliefs about teaching reading. One of the possible explanation for the inconsistency between quantitative findings and qualitative findings is the sampling
methods. Patton (2002), by introducing different strategies for purposeful sampling, explained that the purpose of purposeful sampling methods is “to capture major variations rather than to identify a common core” (p. 40). Through the purposeful sampling method, there may be a chance that all participants selected in the qualitative part indicated coincidentally different results from the whole sample of the study.

The consistency between beliefs about reading and those about teaching reading in the qualitative part illuminated the following sub-findings. First, through analyzing the seven participants’ stated beliefs, I found that multiple beliefs instead of single, dominant beliefs existed in their belief systems. Specifically, neither of the seven participants in the study held a single, dominant theoretical orientation. Five of the teachers held a dual belief system, and the other two (i.e., S and L) held a multiple belief system. This finding reconfirmed what had been discussed in the research question one.

Second, all seven teachers held cognitivist teaching beliefs, but not all the teachers held behavioristic or constructivist beliefs. This finding was interesting, but contradictory to what had been indicated in the quantitative results. As discussed earlier, in the survey responses teachers’ exhibited more behavioristic and constructivist beliefs than cognitive beliefs. One reasonable explanation is that behavioristic beliefs were the earliest and oldest beliefs, and therefore considered to be deep-rooted and difficult to alter (Almarza, 1996; Borg, 2003; 2011; Clark, Worthington & Danser, 1988; Johnson, 1992; Pickering, 2005). Constructivist beliefs were then, as discussed, the latest beliefs that guided innovation in reading instruction, and thus may be more frequently used than the cognitivist beliefs (e.g., Johnson, 1992; Kirkgoz, 2008). However, while quantitative
results indicated both the earliest and the latest theoretical orientations and had yielded more teacher beliefs than the cognitivist orientation, the qualitative findings indicated that all seven teachers believed in the cognitivist orientation, the orientation that focuses on student reading comprehension.

Third, a major finding in this study indicated that the seven teachers were able to apply what they defined as core or peripheral beliefs about reading to their core or peripheral beliefs about teaching reading. This finding confirmed findings of the previous studies. For example, Phipps and Borg (2009), by investigating tensions between grammar teaching beliefs and actual practices of three teachers, hypothesized that core beliefs were more stable and influential than peripheral beliefs in shaping teachers’ instructional decisions. In this study, the theoretical orientation that indicated a teacher’s core beliefs about reading was in most cases the same theoretical orientation that indicated their core beliefs about teaching reading. This finding was also consistent with the theoretical orientation in teachers’ peripheral beliefs; it again showed that teachers’ stated beliefs about reading were consistent with their stated beliefs about teaching reading in the study.

**Teachers’ Stated Beliefs and Actual Practices**

With respect to research question three, findings from both within-case studies and cross-case studies indicated that teachers’ stated beliefs about teaching reading were both consistently and inconsistently indicated in their actual practices.

This finding from within case studies confirmed findings from previous studies in two different camps. Some literature indicated that stated beliefs affect teachers’ actual
practices in the classroom (e.g., Farrell & Kun, 2007; Golombek, 1998; Johnson, 1994; Ng & Farrell, 2003). Other empirical studies, however, indicated inconsistencies between stated beliefs and actual practices (e.g. Basturkmen, Loewen & Ellis 2004; Farrell & Kun, 2007; Feryok, 2008; Lee, 2009; Orafi & Borg, 2009; Phipps & Borg 2009). The within case studies of the whole study yielded similar findings of the previous studies. Specifically, Y and D were the two teachers and the only case that showed consistencies between their stated beliefs about reading and stated beliefs about teaching reading. They also held the consistent theoretical orientations in their actual practices. In contrast, the other three cases with five teachers showed inconsistencies in either their beliefs about reading and teaching reading, or their beliefs and practices. Some teachers (e.g., S and L) held more types of theoretical orientations in their stated beliefs than in their actual practices. Some others (e.g., LY, X, and R) held fewer theoretical orientations in their stated beliefs than in their actual practices. This study joined the existing literature by confirming that while consistency existed between stated beliefs and actual practices among all teachers, inconsistencies were more frequent. The non-consensual results between consistencies and inconsistencies reconfirmed the complexity of the belief system and confirmed the non-linear, interactive nature of the relationship between beliefs and practices.

Apart from the findings from within-case studies, cross-case studies also yielded consistencies and inconsistencies between stated beliefs and actual practices. First, this study confirmed that teachers’ specific theoretical orientations highly influenced their selection of instructional methods. Specifically, teachers who reported the instructional
strategies under a specific theoretical orientation in their stated teaching beliefs may transfer the reported strategies in their actual practices. This is one consistency between teachers’ beliefs and practices, particularly for the behavioristic theoretical orientation. For example, teachers in a behavioristic reading orientation gave students more test-based, rote instruction. Five specific methods were used frequently during their lessons. These methods included reading aloud, pattern drill practice, translation, dictation, and sentence-making. Some teachers, e.g., R and Y, emphasized test-taking skills in their actual practice. Teachers with a cognitive reading orientation used methods like cloze or text structure analysis in their classrooms. In contrast to the behavioristic and cognitivist reading orientations, teachers in the constructivist orientation used more time for student peer discussion than that for rote instruction.

A variety of possible explanations may be given for how theoretical orientations influence the selection and use of instructional methods. These explanations centered around how “epistemological beliefs play a key role in knowledge interpretation and cognitive monitoring” (Pajares, 1992, p. 325). The centrality of epistemological beliefs, which concern the certainty, process, and nature of knowledge has been confirmed in previous studies (e.g., Anderson, 1985; Kitchener, 1986; Nespor, 1987; Nisbett & Ross, 1980; Peterman, 1991; Posner et al., 1982; Schommer, 1990). In this study, teachers’ different orientations were based in teachers’ different epistemological beliefs, as confirmed by the previous studies. These different epistemological beliefs then influenced the selection of different instructional methods.
However, there were also inconsistencies indicated from the cross-case analysis. For example, one major finding from the qualitative part was that all seven observed teachers held a behavioristic orientation in their actual practices, as they all used behavioristic methods in their actual practices. This finding indicated inconsistency with the unanimous theoretical orientation indicated in their stated beliefs. As discussed earlier, all seven teachers held the cognitivist orientation in their stated beliefs about reading and teaching reading. However, when observed teaching in the classroom, their practice did not indicate that they all used cognitivist instructional methods. This finding indicated that teachers’ theoretical orientations in actual practices were not necessarily consistent with those theoretical orientations indicated in their stated beliefs, and vice versa. In other words, having a specific orientation in stated beliefs was not a significant predictor of holding this orientation in actual practice.

**Implications for EFL Teachers and Teacher Team Leaders**

By closing this dissertation, I aim at looking at any hidden or missing pieces that I did not address but could be addressed. These hidden or missing pieces could provide insights to teachers on how they can consider improving their practices. Going through my transcriptions of the classroom observations guided me to notice an imbalance between teacher talk and student talk in the classroom. This imbalance made me think what implications I can give to teachers involved in the study and beyond. It also made me think what theory or conceptual framework I could use to provide my reasoning for the implications.
One of the primary findings of the current study indicated there were inconsistencies between teacher beliefs and practices. The findings provide insights for future studies that would concern how these inconsistencies might be caused by factors including experiences and classroom contexts. Learning and teaching do not occur in a vacuum, but instead are shaped by the environment and the people around us. This knowledge led me to turn to frameworks that tie in more closely with the human factors affecting beliefs. I use the zone of proximal development (ZPD) as a conceptual framework to discuss this study’s implications for teachers and teacher team leaders. Teacher team leaders, at most Chinese universities, are individuals who are responsible for organizing faculty meetings for teachers and evaluating teachers’ practices. In the current study, S, LY, and X were all teacher team leaders.

Vygotsky (1978) defined the ZPD as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers” (p. 86). He conceptualized the ZPD to explain how group or paired learning when combining certain ability levels can be more effective than students learning on their own. Simply stated, Vygotsky posited that what students can do together today, they can do by themselves tomorrow. This fundamental principle from the ZPD applies to learning at all levels, from college classrooms to teacher enrichment programs. Based on the transcriptions of classroom observations, I see three major implications for teachers and teacher team leaders to consider.
First, as I mentioned earlier, I noted an imbalance between teacher talk and student talk in some of my classroom transcriptions. Discussion in all classrooms was primarily teacher-led. Specifically, I found that students were given little opportunity to talk, other than answering questions posed by the teacher. When student talk was observed, it mostly took the form of either a quick yes/no response or simple one word or two-word answers to teacher questions. Student talk took the form more of responses and answers rather than actual dialogues between teachers and students. Vygotsky’s developmental theory stresses that learners do not engage in classroom tasks and activities without involving their social relationships, and their psychological processes including self-regulation are developed through interactions with people and learning context (Stetsenko & Vianne, 2009). Providing students with more time to talk could increase student engagement in the reading and learning process. Thus, I would suggest that teachers spend time reflecting on the amount and balance of classroom talk between themselves and their students. Specifically, I suggest that teachers create a classroom environment in which classroom talk between teachers and students is more balanced—or even in which student talk occurs more than teacher talk. More time could also be provided to students for interacting with other students and also for communicating with teachers. If teachers design classroom activities and tasks that require student participation, they could align coherently with what Vygotsky posited: what students will be able to do together today, they will be able to do by themselves tomorrow.

Second, as mentioned earlier, the fundamental principle from the ZPD applies not only to student learning but also to teacher learning. Specifically, just as students would
benefit from interaction and communication with their teachers and peers, teachers need the same. Through interaction and communication with peers, teachers may be prompted to reflect on their actual practices, share reflections with each other, and think together about what instructional practices make teaching effective. While it may be abrupt or biased to assume that novice teachers are less capable than experienced teachers in their teaching performance, it is suggested that novice teachers talk more and reflect with experienced teachers (Peterson & Williams, 1998). Vygotsky’s ZPD (1978) highlighted the important and necessary process that a novice learner needs to go through to learn from an expert. Through interaction with peers, teachers can learn from their peers who have more experience in the field of teaching. Peer talk may help teachers think about how to improve their current teaching and acquire new knowledge. In other words, what teachers are able to do together through discussion today, they will be able to do through practice by themselves tomorrow.

Third, I would like to provide more explanations as to why reflection is not only important to teachers but also to teacher team leaders. The findings of this study indicated that many teachers who believed in a cognitivist practice showed no signs of implementing that framework in their classrooms. This has significant implications for teacher team leaders. Teacher team leaders organize faculty meetings for teachers. At these faculty meetings, one of their major responsibilities is to ask teachers to reflect on their teaching from the previous week or month and share these reflections with their members in the team. Besides offering an opportunity for proximal development, these meetings are also opportunities for teacher team leaders to arouse teachers’ awareness of
what unnoticed problems, such as a lack of methods reflecting a specific kind of core beliefs, might exist in their actual practices. This is especially important, as participant teacher team leaders (i.e., S, LY, and X) even did not align their own beliefs with their practices in the study. Reflection on these issues would likely benefit them on an individual and professional level. I would suggest that teacher leaders identify and discuss these problems with their team members, and help provide solutions. For example, team leaders could facilitate discussion by asking all teachers in turn to prepare a presentation on student-talk-centered teaching strategies. This would both encourage and model a less top-down model; the more experienced teachers would also gain new ideas so that the conversation is two-way—a conversation instead of a lecture. The findings in this study suggested that more recent theories, or those currently studied in teacher education programs, are more likely to stick with and influence teachers in the long term. Thus, the new teachers coming out may have new ideas and teaching strategies to share that could even benefit the team leaders.

Moreover, I would suggest that teacher team leaders emphasize the importance of teacher reflection, especially between novice and experienced teachers. Teachers may reflect on their own practices after class, and then talk with peers about their reflections, perhaps to ask questions, gain insight, seek clarity, etc. In addition, I would also suggest teacher team leaders themselves engage in reflective practices, such as journaling, observations by other teachers, and exploring current research developments in both their core frameworks and those in their periphery. Teacher team leaders are also inservice teachers. Reflective practices help them acquire new knowledge, examine assumptions of
everyday practice, and foster self-awareness and critical thinking (Boud et al. 1985; Boyd & Fales, 1983; Mezirow, 1981, Jarvis, 1992). By examining practices, teacher team leaders may see how reflective practices could alleviate tensions or inconsistencies between their beliefs and their practices, and provide solutions to practical problems.

**Conclusion**

This mixed methods study indicated that complexity was the primary feature of the Chinese EFL teachers’ belief system. Quantitative findings from this study indicated that there was significant association between reading beliefs and teaching beliefs only in the constructivist orientation, whereas there was no statistical association between reading beliefs and teaching beliefs in neither behavioristic nor cognitivist orientations. Findings from both within- and cross-case studies in the qualitative part also indicated that both consistencies and inconsistencies existed between teachers’ stated beliefs and actual practices. By joining the existing literature, I discussed findings of the study based on three research questions and provided different, possible explanations for this complex phenomenon. Finally, I offered implications for teachers and teacher team leaders.
APPENDIX A

OPEN-ENDED QUESTION SURVEY
APPENDIX A
OPEN-ENDED QUESTION SURVEY
Adapted from Burke Interview Survey (1987)

Name (INITIALS)_________________________________
Age_____________________________________________
Date _________________________________ Sex _________________
Willing to participate in follow-up interviews and classroom observations? ______

Direction: Please answer the following questions by providing as many details as you can. For each question, please answer it with at least 5 full sentences. Do not worry about wording, punctuation, or correct definitions/citations. The purpose of these questions is to understand how you perceive reading and teaching reading. Please write down answers to these questions on the given papers.

1. What does the term English reading mean to you?
2. Can you describe what a good English reader is?
3. Who is a good English reader you know?
4. What makes that person a good English reader?
5. When a good English reader comes to something s/he does not know, what do you think s/he does (to solve the problem)?
6. If you know one of your students was having difficulty in reading English, how would you help him/her?
7. What should an English teacher do to help his/her student who does not read well?
8. What are some successful strategies you use to teach reading?
9. Why do you feel these strategies are successful?
10. What do you think is the most important in teaching reading?
APPENDIX B

RUBRIC FOR EFL, TEACHER BELIEF RESPONSES TO SURVEY
APPENDIX B
RUBRIC FOR EFL TEACHER BELIEF RESPONSES TO SURVEY

Direction: Reviewers should go strictly with the rubric to code reading beliefs and teaching beliefs. The rubric, especially for the part on teaching beliefs, can also be used as points for classroom observation protocol.

<table>
<thead>
<tr>
<th>Codes; Orientations; Tenets</th>
<th>Key Words or Foci of Reading Beliefs</th>
<th>Exemplary Responses</th>
<th>Key Words or Foci of Teaching Beliefs</th>
<th>Exemplary Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Behaviorism</td>
<td>✓ Vocabulary, grammar, etc.</td>
<td>1. It is a language skill; 2. He/she can get the structure, theme. 3. extensive reading; 4. read more;</td>
<td>✓ Translation-based. ✓ Read aloud. ✓ Test-prep skills. ✓ Reference books, dictionary, internet, etc. ✓ Repeated reading. ✓ Extensive reading. ✓ Monitor/Timing reading. ✓ Reading habits</td>
<td>1. Check sth. on the internet; Check books to figure out the meaning; 2. Try to select some proper material for him and laid a solid foundation first; 3. For words, I insist on teaching them the root, the prefix and the suffix; 4. For pronunciation, I teach them vowels and consonants one by one.</td>
</tr>
</tbody>
</table>

Skill-based, focusing on mimicry, memorization and repetition; ✓ Texts in English. ✓ Reading fluency/fast. ✓ Pronunciation, sounds, letters, words, etc.
<table>
<thead>
<tr>
<th>2</th>
<th>Cognitive Beliefs: rule-based, focusing on comprehension of the language</th>
<th>✓ Seek and process information; ✓ Thinking patterns; ✓ Guess the meaning; ✓ Read to get the whole idea or structure; ✓ Make connection with experiences</th>
<th>1. It means widening your view; 2. It is a tool to get information via English; 3. Associating the personal experience with the reading materials; 4. The process of using English words to obtain information.</th>
<th>✓ Guess words. ✓ Infer word meanings from the context. ✓ Authentic materials/literature. ✓ Focus on inferential meanings of the words. ✓ Broaden horizons/views. ✓ Retell/Paraphrase ✓ Experience-based.</th>
<th>1. The most important in teaching reading is the analysis in all aspects. 2. Search for information about it. 3. Guess meaning from context. 4. Reading skills would help them understand better.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Constructivism Function-based, focusing on the authentic use of the language within situational contexts;</td>
<td>✓ Communication with the author. ✓ Cultural background. ✓ Reader motivation, interest, self-confidence, patience, etc. ✓ Reading appreciation/entertainment.</td>
<td>1. Good English reading means have a conversation with the writer. 2. It is a window open to another culture. 3. Appreciate the beauty of English literature. 4. …cultivate my taste; feel pleased in reading; 5. fully understand the author's intention of writing;</td>
<td>✓ Suggestion/Guiding questions; ✓ Collaboration/learning ✓ Consult others. ✓ Read through peer talk and interaction</td>
<td>1. If possible, communicate with the author; consult the professionals in this area; 2. For difficult articles, raise some questions ., let students read with these questions; for easy articles…; 3. Pay more attention to the interaction with students, discuss with the students;</td>
</tr>
</tbody>
</table>
APPENDIX C

INFORMED CONSENT
APPENDIX C

INFORMED CONSENT

Study Title: READING TEACHERS’ BELIEFS AND PRACTICES: A MIXED-METHODS STUDY OF CHINESE EFL TEACHERS

Investigators: William P. Bintz (Principal Investigator), Yang Gao (Co-Investigator)

You are being invited to participate in a research study. This consent form will provide you with information on the research project, what you will need to do, and the associated risks and benefits of the research. Your participation is voluntary. Please read this form carefully. It is important that you ask questions and fully understand the research in order to make an informed decision. You will receive a copy of this document to take with you.

Purpose:
This mixed-methods study aims to investigate the relationship between English as a foreign language (EFL) teachers’ stated beliefs and their actual practices. Specifically, there are two relationships to be explored in this study. The first one is to explore if EFL teachers’ stated beliefs about reading are in/consistently indicated in their stated beliefs about teaching reading. Second, the study also aims to understand if EFL teachers’ stated beliefs about how they teach English reading are consistent with their actual practices in classrooms.

Procedures
The design of the study is an explanatory sequential mixed-methods design, in which a quantitative design is implemented first and then followed by a qualitative design. The quantitative part is designed to examine the relationship between teachers’ stated beliefs about reading and their beliefs about teaching reading. The qualitative design is then used to examine if the participants’ stated beliefs about reading and teaching reading are consistent with their actual practices.

The researcher will distribute the consent forms and the open-ended question surveys to the selected sample and collect the written responses from the participants in person. For the qualitative part, classroom observation will be used to collect data on teachers’ actual practices. The researcher will first schedule with the participants for actual classroom observations and then go to their classrooms to observe. A detailed observation protocol, which is designed according to the categorical variables in the quantitative part, will be used in the observation process. It is used to check the mis/alignments between observed variables and stated variables in the open-ended question survey.
Audio and Video Recording and Photography
For sake of confidentiality, data from Phase I in this study will be anonymized and any shared responses will include associated pseudonyms. Data from Phase II will be shared with only limited audiences (in-service teachers and teacher educators). Only participants’ demographical information like gender and educational background may be used in future studies. Audio records, Excel and SPSS files, SEM files, transcripts, and scanned documents involving the data of the study will be stored in a locked cabinet in the research staff’s office (410 White Hall). In addition, the data will be stored in a password-protected computer, and be anonymized with the key file linking pseudonyms/IDs. Once the research staff leaves the study or no longer uses the data for academic purposes, all the data documents will be destroyed (also, please see audio/video consent form).

Benefits
Participants in the study will not receive any honorarium; however, their participation may provide general benefits to society. Specifically, data from participants in both phases will be used to better understand teacher cognition associated with effective forms of English reading instruction.

Risks and Discomforts
There exists no more than minimal risk for participants in Phase I, the phase of survey data collection. Audio recordings in Phase II, the phase of observations and interviews, may be shared in conference presentations, professional development, and teacher education courses. The interview analyses will be presented in the form of academic papers, and there might be a risk of unanticipated psychological or social risk to these interviewees.

Privacy and Confidentiality
Your study-related information will be kept confidential within the limits of the law. Any identifying information will be kept in a secure location and only the researchers will have access to the data. Research participants will not be identified in any publication or presentation of research results; only aggregate data will be used.

Voluntary Participation
Taking part in this research study is entirely up to you. You may choose not to participate or you may discontinue your participation at any time without penalty or loss of benefits to which you are otherwise entitled. You will be informed of any new, relevant information that may affect your health, welfare, or willingness to continue your study participation. To be more specific, in Phase I, your participation is voluntary and you can decline participation at any time. You will be reminded of this point at every opportunity for consent. Even in Phase II, PI will inform you of the study risks and benefits, the option to opt out of the study at any time, and a request for consent, thus reducing the risk of coercion or undue influence.
Contact Information
If you have any questions or concerns about this research, you may contact Yang Gao at Kent State University by +1-216-534-0688. This project has been approved by the Kent State University Institutional Review Board. If you have any questions about your rights as a research participant or complaints about the research, you may call the IRB at 330-672-2704.

Consent Statement and Signature
I have read this consent form and have had the opportunity to have my questions answered to my satisfaction. I voluntarily agree to participate in this study. I understand that a copy of this consent will be provided to me for future reference.

________________________________  ______________________
Participant Signature              Date
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