Chapter 6
Conclusions and Further Research
Directions
The aim of this dissertation is to gain better knowledge on very young FL learners in instructional settings. Despite significant growth in the numbers of these individuals over the past decade, these children have not received enough attention, and this is especially true in China. Factors that significantly influence FL outcomes and the individual variation in learning behaviors in class are investigated. A group of very young Chinese EFL learners were followed for one and a half years in a private English language institute. Two group studies and two case studies were conducted and the data were analyzed with relatively new approaches. This chapter contains an overarching discussion on the major findings (section 6.1 and 6.2) and a proposal for future studies (section 6.3).

6.1 The importance of the L2 learning environment

The two groups studies (Chapters 2 and 3) aim to explore the impact of internal factors (e.g., phonological short-term memory) and external factors (e.g., input quantity) on very young EFL learners in a Chinese instructional setting. Chapter 2 presents a cross-sectional study targeting the predictive power of age of onset, short-term memory, nonverbal intelligence, English input quantity and quality, English use, and maternal level of English proficiency on very young EFL learners’ English receptive vocabulary, productive vocabulary and receptive grammar. The total amount of school input and level of the English media environment at home were found to be significant predictors for all three aspects of English proficiency, with each aspect having different additional significant predictors. Children at an older age of onset show a better performance in English productive vocabulary and receptive grammar. In contrast to Paradis’ findings (2011) on young ESL learners in naturalistic settings, in the current instructional setting, external factors explained more variance in the three outcome variables than did internal factors. Chapter 3 is a longitudinal study focusing on the best predictors for very young EFL learners’ English vocabulary development. Children were tested twice at an interval of seven months for their vocabulary width (receptive and productive vocabulary) and vocabulary depth (paradigmatic and syntagmatic vocabulary knowledge). The four aspects of vocabulary knowledge increased significantly over seven months. The results reveal that external factors (e.g., input quantity and usage) play an important role in a child’s FL vocabulary development. Learners that are at an older age of onset of English benefit more from English practice. The data also show that there is significant conceptual transfer between L1 and L2, which is relevant to FL learners as young as three years old.

Both studies indicate 1) the significance of external factors in very young EFL learners’ language acquisition in instructional settings, which is in line with usage-based theory; and 2) older starters in general outperformed younger starters in the testing results. The crucial status of the
language environment found in the current dissertation confirms the findings in other contexts (e.g., in the Netherlands, Unsworth, Persson, Prins & de Bot, 2014). Returning to the heated debate over whether or not to launch English education early in China, the current finding cast doubts on the notion “the earlier, the better” in a poor FL environment, where input quantity and quality is limited and English usage is scarce. According to previous studies on primary school students, early language learning (ELL) could be beneficial (Nikolov, 2009). Linguistically, young language learners are found to acquire good pronunciation and intonation more easily, and have better language awareness, literacy and tolerance to ambiguity (Johnstone, 2002); metacognitively, early bilingual children demonstrate a better capability to process language, compared to their monolingual peers (Bialystok 2001, 2005); affectively, young learners tend to have a higher motivation (Hawkins, 1996; Nikolov, 1999), less anxiety (Low, Brown, Johnstone, & Pirrie, 1995) and a general positive attitude towards speakers of a foreign language and culture (Csizér & Kormos ,2009; Heining-Boyton & Haimeta, 2007); and social-culturally, peer pressure among children might facilitate their FL learning (Brown, 2000). The linguistic advantages could also be extended to other school subjects (Johnstone, 2002; Griva, Semoglou & Geladari, 2010). However, whether these benefits are able to promote long-term FL development probably depends on the specific learning environment. Muñoz (2008) repeatedly addressed the importance of input quantity and quality to ELL programs. “An early starting age produces long-term benefits when associated with a larger amount of time and massive exposure, as in immersion programs, but not when associated with limited time and exposure, as in typical foreign language learning classrooms” (p. 582). “Recent studies conducted in foreign language settings [from primary school students onwards] have clearly illustrated the role of input and exposure in the equation: an early start leads to success but only provided that it is associated with enough significant exposure” (p. 591). The current study confirms these observations. Parents and policy makers with high enthusiasm for early foreign language programs should be informed that starting at an early age does not guarantee native-like proficiency, and many other factors, especially language exposure and usage, seem to significantly impact ultimate attainment.

In summary, FL learners may benefit from beginning at a very young age. However, simply placing children in an ELL program does not guarantee success. To fully activate their “implicit learning mechanisms that characterize their language learning capacity” (DeKeyser, 2000, pp. 520), environmental factors, such as input quantity, input quality and language usage, should be provided special attention.
6.2 Interpersonal and intrapersonal variation in learning behavior

Chapters 4 and 5 aim to depict the potential behavioral variation that exists between different very young FL learners and within one child over time. Chapter 4 outlines phases and variations of four Chinese preschoolers’ English development in a private language institute in China over five months. While the behavior of all learners developed from nonverbal to verbal in general, the children varied significantly in terms of time of entry into the verbal phase, in the extent of interaction with teachers and peers, and in learning style. Temperamental traits (e.g., adaptability and activity level) were found to be useful in interpreting these differences. While comparing children to each other, it was found that each child’s own behavior also changes significantly over time. Chapter 5, therefore, focuses on one child’s behavioral development and explores the coordination and developmental pattern of different behaviors. The synchrony of the verbal and nonverbal coordination is significantly greater than the chance level, suggesting a close relationship between body language and verbal production during the child’s initial FL learning period. Body language, therefore, could greatly promote communication when a child’s FL language competence is limited. In general, such coordination between verbal and nonverbal behaviors becomes more flexible in general over time, indicating the child is better adapted to the FL instructional setting and has an increased acquaintance with the English language. Focusing on the verbal behavior, both repetition and non-repetition showed specific patterns. The route of non-repetition is more predictable than that of repetition, implying the varied influence of internal and external factors on different learning behaviors. Learning behaviors driven by external factors (e.g., children’s repetition based on teachers’ utterance) appear to be much less stable than those driven by internal factors (e.g., children’s English response dependent on their language competence).

Both Chapter 4 and Chapter 5 address the individual differences in FL learning behaviors in instructional settings and have potential pedagogical values. The finding that children differ markedly from each other confirms Mihaljevic Djigunovic’s insight (2009) that the widespread opinion in the field of ELL that children are similar to each other and that it is, therefore, not necessary to focus on individual differences is a misconception.

At the interpersonal level, researchers in the past tried to associate variation with intelligence, aptitude, age, gender, attitudes and motivation, language anxiety, learning styles, strategies and a willingness to communicate (Sun, de Bot & Steinkrauss, published online June 5, 2014). The current dissertation introduced a new factor, temperament, and demonstrated how it can be related to the variation in very young FL learners’ language behavior. A better understanding of individual differences might enable FL teachers to provide quicker and better scaffolding to children in class.
At the intrapersonal level, the microgenetic study in this dissertation demonstrates how a dynamic system of a very young FL learner’s language learning undergoes self-reorganization and interacts with the environment over time. The non-linear measures, under the guidance of Dynamic System Theory, provide us more information on the fluctuated nature of the learning process compared to traditional linear measures, and this in turn might help FL teachers make better predictions on an individual child’s performance and need.

### 6.3 Limitations and directions for future research

The studies in this dissertation have several limitations. At the group study level, the teachers’ English proficiency and classroom instructions were not able to be measured or followed due to the frequent turnover of English teachers in the private language institute and the exploratory nature of the current study. Previous studies indicate that a teacher’s English proficiency and language use could also influence EFL children’s language acquisition (Unsworth et al., 2014; Bowers and Vasilyeva 2011). The different amounts of vocabulary richness and grammatical complexity provided by the teachers might impact the language development in general. A closer look at teachers’ general qualifications and class performance might provide more information about the difference between teachers with various backgrounds (native English teachers vs. nonnative English teachers, in particular). This point will be further discussed in the section on future research. Besides the teacher factor, the elicitation of home English input quantity could also be improved. The two group studies used a single questionnaire to estimate children’s current English input at home, but this factor might vary through time due to the sickness of young children and other factors. A more reliable approach could be the diary approach (De Houwer & Bornstein, 2003), where researchers ask parents to write down a child’s daily schedule for several weeks, and the records would more precisely reflect a child’s language input in different situations. The cumulative home input might provide us with more information about a child’s input difference and its impact on language development. At the case study level, the sample size should be larger to confirm and generalize the results. E.g. the intra-individual study could be used as an example; more data could reflect a clearer tendency of verbal and nonverbal behaviors. It would also enable us to use regression and other smoothing skills to verify the significance of the tendency, enhancing the explanatory power of the results.

The current dissertation only reveals a tip of the iceberg of the rich, complex and dynamic nature of very young EFL learners’ language development. Child learners are chosen as the focus in this study but it is worth noting that other parties, such as teachers/schools, parents and the national
ministry of education also play crucial roles in the success of ELL programs. These parties deserve our special attention and could be studied, along with children, with regards to the three E’s: efficiency, equality and educational continuity of very young FL programs in the future (Figure 6-1).

![Diagram of Very Young FL Education]

**Figure 6-1. Three “E” concerns of very young FL education**

### 6.3.1 Efficiency

While the government and parents disagree on whether or not to launch FL education at a very young age, an urgent task for language educators is to ensure that children benefit from existing early FL programs and make education efficient. Because language exposure plays such a crucial role, it might be perceived as a breakthrough in achieving the goal of efficiency.

In the schools, teachers’ qualifications need to be improved (Nikolov, 2009; de Bot, 2014). The teachers need a good command of English to fulfill their teaching duties. According to Butler’s study in Korea, Japan and Taiwan (2004), many ELL teachers felt they needed to develop better productive skills to meet the minimum levels they thought necessary to teach English in class and, therefore, Butler called for appropriate training programs and systematic evaluation for these teachers. Not only does the teacher’s language proficiency need to be enhanced, but they also need to obtain specific knowledge on child development because they are facing a special group of learners whose cognitive system is quickly developing. Teaching very young learners might be a big challenge, and many teachers face difficulties in managing children, using L2 and properly applying teaching approaches in class (Lugossy, 2006; Szulc-Kurpaska, 2007; Nikolov, 2009). Teachers’ qualifications in China is a particularly important issue (Zhang, 2009), because many of the native English speakers who are hired by early EFL programs as teachers have neither had any professional training at a normal university nor obtained profound knowledge on Chinese children’s
characteristics. They should be more selectively recruited and trained properly in the future. Better teaching skills and more knowledge about Chinese children on the part of the teachers might benefit both teachers and students.

At home, many parents who lack confidence in their L2 rely on media devices, such as computers and mobile devices, to provide FL input to their children. How to use these types of media to boost and maintain children’s interest in the FL is a potential challenge. Pinter (2014) suggested that researchers design learning materials (e.g., computer games) together with children, making use of them as “active participants” (p. 168) because they are the main agents in the new learning paradigm. Butler (published online, October 1, 2014) answered this call and invited primary school students in Japan to design computer games in class to learn English words. The results are positive: not only were the gaming features identified that attract children the most, but also their learning strategies were discussed by the author. Serious language games designed in these studies might have a better chance at gaining popularity among children. Along with these products, parents should be informed how to use them properly at home. Parents are potentially helpful stakeholders in early FL education, because they are very keen on creating a good FL environment for their children. However, to enlist the parents’ help is a difficult task because they lack experience and expertise in most cases. An organization to provide them professional suggestions is out of sight in countries such as China. The website “Growing up Bilingual” for Dutch bilingual children, created by Brasilheiro, Pinto and Unsworth10, might serve as a good example for ELL researchers on how to bridge their studies and daily practice.

6.3.2 Educational Continuity

The continuity of ELL is a big challenge in many countries (Nikolov & Curtain, 2000; Nikolov, 2009). Very young FL learning could be interrupted when 1) children are placed at a wrong level in a new learning environment; 2) they cannot continue the FL learning due to limited FL access or 3) the teaching methodology has been changed drastically and children experience difficulties adapting to it (Nikolov, 2009). In her research on unsuccessful adult learners who started their FL learning at a young age, Nikolov (2001) found that more than half of them were placed in beginner classes or had to discontinue using the language they learnt for a long time when they moved to a higher level of education. This is detrimental to the learners’ motivation. In China, very young FL programs are conducted without the guidance of regulations in most cases; therefore, the articulation between different levels of FL education is problematic (Zhang, 2009). Millions of

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10 http://www.growingupbilingual.org/
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children might be presented again in primary school with what they were taught in preschool, causing a huge waste of time and energy and serious learning demotivation. Therefore, to find out how ELL programs may be beneficial in the long run, educational continuity is a big issue for research. Questions such as the optimal articulation between different levels of FL education and children’s accommodation at higher levels of education could be good points of departure for this type of research (de Bot, 2014).

6.3.3 Equality
Equality refers to the accessibility of ELL to children from different social-economic backgrounds. Because of high tuition fees, only children from the upper or middle class can afford such educational programs in many countries. Children in rural areas or from low SES families are less likely to attend an early FL program (Nikolov & Mihaljević Djigunović, 2011). Taking the English bilingual preschool programs in China as an example, compared to the average tuition fee for programs without English classes, the cost is approximately doubled if there is a Chinese teacher of English and could be tripled if there is a native English teacher (Li, 2014). Such programs violate the principle of making education accessible and fair for every child, as Zhang (2009) argues. The equality issue provokes a more fundamental question: how is very early FL education perceived? Is it a commodity or is it part of fundamental education? With parents’ increasing passion for FL learning, there is a call for the national ministry of education to take a stand. The relevant laws and regulations should be developed and published to guarantee a fair and respectable learning environment for very young FL children.

In summary, a very young child’s initial FL experience will have a lasting impact on his/her learning outcome and motivation in the future; therefore, early classroom instruction and language development deserve our special attention. Future studies call for a focus on the efficiency, equality and educational-continuity of ELL programs, to improve the input quantity and quality at school and at home, to optimize the articulation of English education between different academic stages, and to regulate the existing early FL programs.