University of Isfahan
Faculty of Foreign Languages
English Department

M.A. Thesis

The Effect of Using Synthetic Multisensory Phonics in Teaching English Literacy on Literacy Learning and Reading Motivation: A Case of Iranian Young Learners of English

Supervisor:
Dr. Dariush Nejad Ansari

Advisor:
Dr. Abbas Eslami Rasekh

By:
Leila Farokhbakht

Winter 2015

In the Name of God, the Most Compassionate, the Most Merciful

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کلیه حقوق مادی مرتبط بر نتایج مطالعات،
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مطالعه ی موردی کودکان زبان آموز ایرانی

در تاریخ ..... توسط هیأت داوران زیر بررسی و با درجه عالی و نمره ... به تصویب نهایی رسید.

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کودکان ایران

زمین

Dedicated to:

Christopher Jolly

Abstract

The present study sought to investigate the effect of adopting a synthetic multisensory phonics (i.e. Jolly Phonics) for teaching early English literacy skills on literacy learning and reading motivation of Iranian EFL young learners. It also aimed to find out whether there is a significant gender difference in the effect of this multisensory method on enhancing boys' and girls' literacy attainments as well as their early reading motivation. To this end, 100 zero-beginners of English (50 boys and 50 girls) aged between 10 to 12 participated in this study. Among the 50 boys participating in this study, 25 were randomly assigned to the experimental group (i.e. the group who received the JP programme as the treatment) and 25 were assigned to the control group. Likewise, from among the 50 girl participants, 25 of them were randomly assigned to the experimental group (i.e. JP group) and the other 25 were assigned to the control group. While the students in the control group were taught basic English literacy skills through the rote traditional phonics, the learners in the experimental group were taught English literacy (i.e. letter-sound knowledge and reading & writing in the word level) via a synthetic multisensory phonics named Jolly Phonics. After a one-month English course, all the participants took a reading and a spelling test. They also filled in a 4-point scale Early Reading Motivation Questionnaire (ERMQ). A set of descriptive and inferential statistics were used to analyse students' scores obtained from the tests and the questionnaire. The results showed that the experimental (Jolly Phonics) group had a better performance on the reading and spelling tests as well as a higher motivation in early English reading skills than the control group. Furthermore, it was revealed that the JP instruction didn't have any significant effect on male and female learners' literacy attainment. However, the findings demonstrated that the multisensory phonics had a more positive effect on boys' reading motivation than girls'.

Keywords: phonics, multisensory approach, synthetic phonics, Jolly Phonics, literacy, EFL young learners, reading motivation.

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List of Abbreviations

ELL: English Language Learning/Learners

JP: Jolly Phonics

EFL/FL: English as a Foreign Language/Foreign Language

ESL/SL: English as a Second Language/Second Language

Chapter One

Introduction

1.1. Overview

Learning to read and write is among the most important skills required for a child's academic success at school as well as in his/her future education. Learning literacy skills will influence one's performances in other disciplines. Literacy can have substantial impacts on developing livelihood. As claimed in a report by The World Bank (2002), people who had fulfilled literacy courses were shown to be more enthusiastic to improve their livelihoods. In addition to that, Eldred (2008) mentioned that literacy is associated with specific job skills as well as developments in critical thinking and problem solving. Similarly, Ekpo, Udosen, Afangideh, Ekukinam and Ikorok (2007) asserted that:

> The goal of reading instruction at the primary school level is that each child should be functionally literate and be able to communicate effectively. Functional literacy means that individuals can read with understanding and be able to apply knowledge gained to solve life's problems (p. 2).

Over the years, there's been a tremendous body of research conducted on the factors that affect literacy learning and development (Pretorius & Mampuru, 2007). However, while researchers have come to an agreement about the different linguistic, socioeconomic, sociocultural and developmental elements in various contexts such as home, school and classroom which directly or indirectly influence the language and literacy achievements, a considerable debate about the best ways of teaching literacy to children continues to exist in the English-

speaking countries (Harrison, 2004). In the past, as Chall (1983) put it, at the centre of this great debate was the disagreement among those researchers, educators and policy makers who emphasized the bottom-up approaches (i.e. phonics) to literacy which focused on breaking the code and those who placed emphasis on whole-language (i.e. top-down) approaches in which meaning-emphasis was the centre of attention.

In recent years, however, with the growth of convincing evidence from cognitive science which displays a strong relationship between success in literacy, phonemic/phonological awareness, and phonological skills (Anderson, 2004; Goswami& Bryant, 1990) and with the educational ministries of English-speaking countries seeking verification from 'scientifically' based research (Schemo, 2002), phonics has been adhered to as the best method of teaching literacy especially in primary stages.

The great debate, also referred to as the 'reading wars' (Burkard, 1999) has now shifted from the debate among the proponents of whole-language approaches and phonics to a disputation over what kind of phonics instruction must be adopted in teaching literacy. According to Burkard (1999),

> There is little doubt that proponents of phonics have won the reading war. Almost overnight, the politics of reading changed. Whole-language texts started gathering dust in university libraries. Phonics was back in fashion. The issue was now finding the best way to teach it (p. 7).

Due to the increasing impact of the governments and curriculum designers of English-speaking countries on selecting phonics as the literacy instruction [e.g. in US and UK (Gregory, 2008; Harrison, 2004) and in Australia and New Zealand (Bowey, 2006)], phonics has also attracted attention in non-native contexts as part of the literacy instruction all over the world (Kuo, 2011). However, unlike the wide range of research supporting the efficacy of phonics instruction especially the successfulness of synthetic and multisensory approaches to phonics (Bowey, 2006; Donnell, 2007; Gaskins, Downer, Anderson, Cunningham, Gaskins & Schommer, 1988; Grant, 1998; Johnston & Watson, 2005; Mohler, 2002; Salfer, 2006; Sumbler & Willows, 1996; Trezek, Wang, Woods, Gampp & Paul 2007), there is a paucity of research in validation of different methods of phonics in L2 non-English environments specifically in EFL contexts. This gap in the literature raises the question of whether phonics, and specially the synthetic multisensory phonics instruction reveals equal effects on English literacy learning regardless of the learning context and the learners.

1.2. Statement of the Problem

In Iran, English as a foreign language is not the medium of communication in daily conversations and everyday life activities. Therefore, students' exposure

to English is only restricted to the English classroom and there barely remains any chance of practicing English for learners outside the classroom setting.

Students in Iran embark on their formal English learning task in the first grade of secondary school when they are about 12 or 13 years old. However, Iranian parents are very competitive by nature and considering the international place of English all over the world and the determining role that mastery of English holds in children's educational future and job opportunities, many parents are willing to have their children start their English language learning as soon as possible. Hence, to attract registrations, lots of private primary schools and even kindergartens offer English language teaching in their curriculum. Nonetheless, since this early inclusion of English language teaching is not confirmed by the government and thus is not among the main subject matters of primary school curriculum, English is placed at the last hours of school days as an extracurricular school course which also requires extra tuition from the parents. As a result, children who are already exhausted at these very last hours of the day at school do not take English seriously as a major school subject and this will result in a poor language attainment on the part of learners. In addition to these reasons, since English is usually considered just as a means of attracting customers in private primary schools, the quality of its teaching is not very desirable and satisfactory. Worse than that, the quality of formal English education in secondary school is very poor too. The textbooks which are written and presented under the supervision of Ministry of Education in Iran are based on very old methods of teaching English such as the GTM.

All in all, because of the overall disappointing conditions of English language teaching at schools and the late beginning of official English teaching in the Iranian educational system, parents resort to language institutes in the hope of giving their children the privilege of good English education. The quality of English teaching in language institutes is usually satisfactory compared to that of schools and the methods of teaching are often based on the ones offered by the new and popular textbooks such as Backpack (Herrera & Pinkley, 2009), First Friends (Lannuzzi, 2011), Family and Friends (Simmons, 2010), etc. which have been written for ESL and EFL purposes by native authors. However, no systematic attention to learners' literacy learning is observed in the language institutes in Iran. Phonics which has been identified as the best method of teaching literacy over the years (Beck, 2006), is used occasionally and from time to time rather than regularly and systematically. In other words, the method of teaching early literacy in most language institutes is the rote traditional phonics. Teachers start by teaching the letters of alphabet and their associated sounds followed by teaching some example words that start with those specific alphabet letters (e.g. *apple* is introduced as an example word for the letter sound *a*). This procedure is usually done through repeated drills in which the teacher chants the words and students repeat after the teacher in unison. As noted by Eshiet (2012), "This method lacks any form of motivation for the pupils as the knowledge gained through rote learning is not easily applicable when they see new words" (p. 3).

Due to the absence of Teacher Training Course (TTC) workshops to train teachers on how to teach phonics systematically, the teachers worsen the situation by their lack of competence in presenting systematic phonics to students and teaching English literacy appropriately. Therefore, the same as what Ekpo et al. (2007) describe, "The consequence is that some students just memorize some words without any clue to how those words are formed or pronounced. At the primary stages, words and short sentences are forced into the children's memory through constant drill and memorizations".

Ohiaeri (1994) and Ekpo (1999) have identified some obstacles to young learners' ability to read at appropriate age in Nigeria, some of which are also true in Iranian EFL context:

1. High cost of books and lack of class readers by most pupils
2. Inadequate instructional time
3. Poor preparation of teachers on reading at initial teacher training institutions
4. Adoption of poor teaching methods
5. Lack of appropriate variation in the teaching approaches to reading, for instance, the use of activities such as picture recognition, storytelling, card games, news reading, cartoon collection, posters, flash cards, role play, story club, reading competition, leisure reading, etc. can be incorporated into reading lessons for variety to generate interest (Edem, 2005).
6. Lack of commitment on the part of the teachers due to poor job satisfaction

As is clear from the factors enumerated by Ohiaeri (1994) and Ekpo (1999), the reason for the failure of most children in mastering English literacy is not because they are incapable to learn but to a great extent is because of the poor teaching methods adopted in teaching literacy. The teachers in schools and language institutes in Iran are required to thoroughly depend on and stick to the prescribed course materials offered by the relevant language institute or by the Ministry of Education in the case of secondary schools. Consequently, the learners are not provided with the right kinds of learning experiences which enable their appropriate mastery of literacy skills.

The irregularity of English writing system that is influenced by other languages adds fuel to this fire. For example, *ch* sounds *sh* in *champagne* which is the effect of French. Another instance is *ch* as in *Christmas* which sounds *k* and is the influence of Greek language. "Several centuries ago, the first dictionary was printed and once the words went into print, that's how they were spelt. But pronunciation changes over the years and yet the link to the letters is not always the same" (Lloyd, 2012). The result is that there are only 26 letters but about 42 sounds in the English language and that's what makes it more difficult to learn to read and write in English.

The above-mentioned impediments are not just specific to Iranian learners' circumstances, but to other EFL/ESL contexts as well. Similar undesirable

learning conditions have also been reported by Ekpo et al. (2007) and Eshiet (2012) in Nigeria. Ekpo et al. (2007), Eshiet (2012) and Shepherd (2013) tried the effect of a synthetic multisensory approach to phonics (i.e. Jolly Phonics) on improving the English literacy skills of Nigerian children and concluded that the Jolly Phonics method produced statistically significant differences in literacy achievements of experimental groups.

Jolly Phonics is a fun and child-centred approach to teaching literacy which has actions for each of the 42 letter sounds of English and teaches five key skills for reading and writing by using a synthetic multisensory approach. These five skills include (i) learning the letter sounds which consist of the alphabet sounds as well as diagraphs (e.g. sh, ai, etc.), (ii) learning letter formation, (iii) blending, (iv) segmenting, and (v) tricky words that have irregular spellings and children learn them separately in this method ("Teaching Literacy with Jolly Phonics", December 2014).

As a solution to overcome the above-mentioned barriers in the way of EFL/ESL children's English literacy, the present study seeks to find out whether adopting a the synthetic multisensory method of Jolly Phonics is going to have significant impacts on helping young Iranian EFL learners to break through their reading and spelling difficulties. Furthermore, since the rote traditional method of phonics utilized in most language institutes and schools does not result in any form of motivation or interest for children and due to the fact that "children's motivation to read is important for their reading development" (McGeown, 2013, p. 1), this study also aims at inquiring into the possible effects that synthetic multisensory phonics (i.e. Jolly Phonics) can have on increasing young learners' early reading motivation.

1.3. Objectives of the Study

Given the importance of literacy skills and the difficulties that young learners face with in reading and writing English at primary levels, this study aims at lighting upon a way to help children triumph over the challenging task of literacy learning. To fulfil this objective, the present study seeks to discover the possible effects that the synthetic multisensory phonics (i.e. Jolly Phonics) can have on facilitating children's early learning of literacy skills. The study also attempts to discover whether this synthetic multisensory approach to phonics is going to turn the mundane task of literacy learning into a motivating joyful process for the young learners. Moreover, the potential influences that this method might have on gender differences in learning literacy are among the secondary aims of this research study.

1.4. Research Questions and Hypotheses

Based on the purpose and the problem under focus in the present study, the following research questions are addressed:

1. Does the synthetic multisensory approach to phonics (i.e. Jolly phonics instruction) in comparison with traditional approach have any significant effect on Iranian young EFL learners' reading skills?

2. Does the synthetic multisensory approach to phonics (i.e. Jolly phonics instruction) in comparison with traditional approach have any significant effect on Iranian young EFL learners' spelling skills?

3. Does the synthetic multisensory approach to phonics (i.e. Jolly phonics method) compared to traditional phonics instruction have any significant effect on Iranian young EFL learners' reading motivation?

4. Is there a significant difference between the performances of girls and boys in the experimental group (i.e. the group to whom literacy was taught through Jolly Phonics) on the reading test?

5. Is there a significant difference between the performances of girls and boys in the experimental group (i.e. the group to whom literacy was taught through Jolly Phonics) on the spelling test?

6. Is there a significant difference between the evaluations made in the Early Reading Motivation Questionnaire by girls and boys in the experimental group (i.e. the group to whom literacy was taught via Jolly Phonics)?

Consequently, based on the aforementioned research questions the following hypotheses were formulated:

H1: The synthetic multisensory approach (Jolly Phonics method) adopted for teaching early literacy does not have any significant effect on the reading skills of Iranian EFL children.

H2: The synthetic multisensory approach (Jolly Phonics method) adopted for teaching English literacy does not have any significant effect on the spelling skills of Iranian EFL children.

H3: The Jolly Phonics instruction adopted for teaching early literacy to children cannot significantly enhance young learners' early reading motivation.

H4: There isn't any significant difference between the performances of the girls and the boys in the experimental group (i.e. the group who received Jolly Phonics as the treatment) on the reading test.

H5: There isn't any significant difference between the performances of the girls and the boys in the experimental group (i.e. the group who received Jolly Phonics as the treatment) on the spelling test.

H6: There isn't any significant difference between the evaluations made in the Early Reading Motivation Questionnaire by girls and boys in the experimental group (i.e. the group to whom literacy was taught through Jolly Phonics).

1.5. Significance of the Study

> Spoken language is used in contexts that offer much support for meaning often from familiar and helpful adults who know the child and interact with him or her regularly. On the other hand, a child faced with a written text has support only from previous knowledge, from what the writer can build in, or through pictures or diagrams that illustrate the text. The writer is much more distant from a reader than is the case with speaking, and this distance can place a high demand on a reader to construct an understanding of the text. (Reid, 1990 as cited in Cameron, 2001, p. 127)

As is maintained by Reid, it is clear that learning reading and writing skills are much more challenging for young learners than acquiring aural/oral skills. "Phonics teaching focuses on letter-sound (grapho-phonemic) relationships, building literacy skills from the bottom up. The usual way involves showing children the sounds of the different letters in the alphabet, then how letters can be combined. Phonics teaching works if it directs children's attention to letter-sound level features of English and helps children make the mental connections between letters and sounds" (Cameron, 2001, p. 149). To achieve this, the present study seeks to apply a synthetic multisensory approach toward teaching phonics to the young learners and therefore offer them a helping hand in facilitating the troublesome task of learning literacy skills. Besides, phonics is usually regarded as "dry, boring and demotivating" (Cameron, 2001, p. 149). Therefore, Cameron (2001) suggests that phonics should be combined with fun activities which raise children's interest such as songs and rhymes, and in stages of oral task. The present study may pave the ground to tackle these crucial issues, which have for long been neglected regarding the bore of phonics teaching, by adopting a fun synthetic multisensory approach to phonics which is believed to enhance learners' motivation towards literacy learning.

1.6. Definition of Key Terms

1.6.1. Phonics or Phonetic Method

According to Richards and Schmidth (2002), phonics is "a method of teaching children to read, in which children are taught to recognize the relationship between letters and sounds. They are taught the sounds which the letters of

alphabet represent, and then try to build up the sound of a new or unfamiliar word by saying it one sound at a time" (p.398).

1.6.2. Multisensory Approach to Phonics

"Using a multisensory teaching approach means helping a child to learn through more than one of the senses" (Bradford, 2008 as cited in Ureno, 2012, p. 2). Mohler (2002) also gives the following definition: "Multisensory instruction received its name because all information was presented via sight, sound, voice, and kinaesthetic means. Multisensory phonics have long been touted as being effective for students with special needs such as the hearing impaired or deaf students, dyslexic children, disabled or poor readers, and underachievers. Since the greatest success for children with reading problems have mostly come from explicit instruction, multisensory instruction has also employed synthetic phonics instruction as one of its major components" (p. 67).

1.6.3. Synthetic Phonics

"The synthetic phonics method adopts the direct, systematic and rapid teaching of letter sounds to pupils. This is immediately followed by teaching them how to blend the letter sounds to form words. In English, pupils are taught the first group of letter sounds which make up a large number of 3-letter words; s, a, t, i, p, n. These sounds can be used to make several 3-letter words e.g. pin, sat, sit, tip, tin, pit, pat. The whole programme is sometimes taught within a few months– usually 9 to 16 weeks with a great deal of emphasis on word reading. Sight words are taught at key points and carefully selected decodable readers are used alongside the programme" (Eshiet, 2012, p. 6).

1.6.4. Jolly Phonics

"Jolly Phonics is a fun and child-centred approach to teaching literacy through synthetic phonics. With actions for each of the 42 letter sounds, the multi-sensory method is very motivating for children and teachers, who can see their students achieve" ("Teaching Literacy with Jolly Phonics", December 2014).

1.6.5. Literacy

Richards and Schmidth (2002) define literacy as "The ability to read and write in a language" (p. 313).

1.6.6. EFL Young Learners

Mckay (2006) refers to young learners as follows: "Young language learners are those who are learning a foreign or second language and who are doing so during the first six or seven years of formal schooling. In the education systems of most countries, young learners are children who are in primary or elementary

school. In terms of age, young learners are between the ages of approximately five and twelve" (p. 1). She further explains that "Young language learners may be foreign language learners, learning a language in a situation where the language is seldom heard outside the classroom. They may be learning languages like Vietnamese, Spanish or Chinese in Germany or the United States or they may be learning English as a foreign language (EFL) in countries like Turkey, Malaysia or Spain" (p. 2).

1.6.7. Reading Motivation

McGeown (2013) states "As reading is an effortful and purposeful activity that often involves choice and perseverance, motivation is crucial for children to develop their reading skills. In fact, there is a vast literature illustrating that children's motivation to read is related to their reading attainment (e.g., Morgan & Fuchs, 2007;Wang & Guthrie, 2004). Furthermore, research illustrates that it is not only children's cognitive skills (e.g., language, decoding skills) that are important for their reading attainment, children's motivation to read is additionally important after taking into account these cognitive abilities (Anmarkrud & Braten, 2009; Logan & Medford, 2011; Medford & McGeown, 2011; Taboada et al., 2009). In other words, to become successful readers, children need the 'skill' and the 'will'" (p. 2).

1.7. Outline and Organization of the Thesis

This thesis is divided into five chapters. Having set the scene in chapter 1, chapter 2 reviews the related literature on literacy issues, phonics, various methods and approaches to phonics, a detailed description of the Jolly Phonics programme which was adopted as the treatment of this study, and literacy and reading motivation of young learners as well as empirical research studies in each of the aforementioned domains. Chapter 3 describes a comprehensive delineation of the research methods and instruments utilized, and a detailed account of research design, assessment procedures, scoring procedures, and data analysis. Chapter 4 reports the results of the 6 proposed research questions through different descriptive and inferential statistics. Finally, in chapter 5, an in-depth discussion of findings and their pedagogical implications is provided. Later on, the chapter acknowledges the limitations of the present study and offers suggestions for further research.

Chapter Two

Review of Literature

2.1. Overview

This chapter will introduce and discuss the relevant research. First, a general account of learning literacy skills will be presented (See 2.2.). After that, the unnatural demands of literacy (See 2.2.1.) as well as the similarities and differences between L1 literacy acquisition and L2 and foreign language learning will be described (See 2.2.2.). Next, the researcher will provide a brief explanation concerning the great debate between phonics and whole language approaches (i.e. 'Reading Wars') as two opposing methods of teaching literacy (see 2.3). Further, the requirements of learning to read and spell in English as well as its pertinence to the phonics approach will be explained (see 2.4 and 2.4.1.). The sections that follow will discuss different approaches to phonics (such as analytic and synthetic phonics) and present related studies and articles on the efficacy of synthetic and multisensory approaches to phonics as well as mixed results about synthetic phonics and therefore the need for further research (see 2.5, 2.5.1., 2.5.2., 2.5.2.1. and 2.5.3.). In the next section (2.6.), the Jolly Phonics Programme which is a synthetic multisensory approach to phonics and is used in the treatment of the present study will be described in detail. Also, the previous empirical studies carried out on the successfulness of this programme will be presented in 2.6.1. The rest of the chapter will deal with motivational and affective issues specifically in the area of literacy learning. In section 2.7, the recent general developments in studying young learner affective characteristics will be considered. In addition to that, with regard to the attention that has been directed towards children's agency in the process of research in recent years, some new participatory and visual methods for eliciting data on attitudes and motivation of young learners is

discussed and explained in 2.8 and 2.8.1. After that, an explanation of literacy motivation as well as gender differences in literacy motivation will be given in 2.9 and 2.9.1. At last, the significance of reading motivation is taken into account. Finally, the researcher will close the chapter with a brief summary (see 2.11.).

2.2. Learning Literacy Skills

Cameron (2001) describes literacy skills as following:

> Literacy skills include being able to read and write different sorts of texts for different purposes. In most societies today, literacy is part and parcel of everyday life for children and adults, and life is full of different sorts of written texts: in the home, on the street, on television, and on computers. Literacy skills are then, not just an additional set of skills learnt at school, but an integral part of people's lives. From their early infancy, children are involved in using writing and reading: for example, when they are helped to write their name on a birthday card to a friend or when they look at story books with adults (p. 124).

According to Cameron (2001), discovering the details of how texts are understood by children is crucial to their educational and personal development and can be supported by good teaching. Although there is more to reading for understanding than just telling what is written down, on the way to understanding, reading links to speaking, as written words are 'decoded' into spoken words. It may appear to us that when making sense of the written text, skilled readers miss out turning text into talk and directly reach the understanding. However, the recent empirical work has revealed that "skilled readers do actually process every letter of words on the page; they just do it very quickly" (Stanovich, 1980, 1988; Oakhill and Granham, 1988 as cited in Cameron, 2001, p. 125).

Reading includes the combination of "visual information from written symbols, phonological information from the sounds those symbols make when spoken and semantic information from the conventional meanings associated with the words as sounds and symbols". Additionally, "skilled writing requires mastery of the fine motor skills to form the written shapes and orthographic knowledge of how written symbols are combined to represent word through spelling conventions" (Cameron, 2001, p.125).

Learning to read and write at a young age is of extreme importance. Children have one chance to get this right and research shows that the earlier the literacy skills develop, the easier it is (Shepherd, 2013). Ehri, Nunes, Stahl and Willows (2001) also advocate that children who do not learn to read in the early stages are in the risk of falling further and further behind in the later stages, as they cannot absorb printed information, follow written instruction, or communicate well in writing. Therefore, given the significance of early learning of literacy and the unnatural demands which it imposes on young learners, selecting the most

appropriate method that will facilitate the teaching and learning of literacy is of extreme importance.

2.2.1. The Unnatural Demands of Literacy

Many children do not acquire literacy skills in natural and trouble-free ways; rather they struggle to learn to read. Therefore, it is important to bear in mind that for becoming literate, most children need skilled teaching (Reid, 1990; Oakhill and Beard, 1999).

Some of the reasons which result in reading problems originate from the historical establishment of literacy and the demands that are then laid down on individual learners. Vygotsky (1978) describes:

> The written language as 'second-order' meaning representation, to capture the idea of two stages between talk and written text in the development of literacy in societies. Spoken language was initially used to represent mental ideas and meanings; in a socio-historical second step, written language was developed to represent talk. (Cameron, 2001, p. 126)

Different societies have created different ways of writing down the spoken language: e.g. English uses an alphabetic system whereas Japanese uses a syllabic system, with each syllable as a unit, and a logographic system, in which symbols directly represent the meanings. As the written form of a language develops over centuries, as a means for representing the spoken language, new rules and conventions emerge in the use of written forms that even have to be learnt anew by each successive generation of children. In the case of English language, some of the spelling conventions date back to the 16th and 17th centuries, others appeared in the 19th century and, since spelling has been fixed while pronunciation has changed over time, many of the rules and conventions of the written language do not match the spoken English today (Stubbs, 1980). That's why the spelling of English does not seem to present a natural match between written and spoken forms to a modern child.

A second way in which written language seems less natural for children than spoken language is in its social context of use. Spoken language is usually used in the contexts which offer a lot of support for meaning, often from the cooperating adults who are familiar with the child and regularly interact with him or her. On the other hand, a child confronted with written text has support only from the previous knowledge, from what the writer can represent, or via pictures or diagrams illustrating the text. The writer is much more distant from a reader than is the case with speaking, and this distance can place a high demand on a reader to construct an understanding of the text (Reid, 1990, as mentioned in Cameron, 2001, p. 127). These unnatural demands of literacy give rise to the debates and controversies over finding the best methods and approaches for teaching literacy

over the years. In the next sections of this chapter, a thorough discussion of these controversies as well as the best methods of teaching literacy will be provided.

2.2.2. Understanding Literacy in a Foreign Language: the Similarities and Differences between L1 Literacy Acquisition and L2 and FL Learning

Before any discussion of literacy development in a foreign language, there is a need to consider the similarities and differences between L1 literacy acquisition and L2 and FL learning. Apparently, all human beings have the 'language instinct' (Pinker, 1994). It is also contended that "all humans possess a "universal" or "central processing" framework for reading and spelling that provides the underlying cognitive and linguistic component skills that are crucial for these tasks, specifically phonemic awareness and visual processing ability" (Kuo, 2011, p.69). These skills are also believed to affect the literacy development in L2 and FL contexts. "It therefore follows that all learners of all languages, whether L1, L2 or FL, utilize a phonological recoding strategy, a visual-orthographic strategy, or a strategy that combines the two to recognize print"(Kuo, 2011, p.69).

All learners might come to the task of reading with the same innate cognitive base. However, prior experience in the form of social and cultural factors can produce contextual differences that can significantly impact the way learners integrate the target language and the degree to which learners rely on different processing strategies. L1 learners begin literacy learning as expert speakers of the language and are therefore more likely to use strategies that utilize their oral knowledge (Kuo, 2011).

Since these learners live within the target language setting, they might also have an (sometimes significant) informal knowledge of written words and reading from prior experience and therefore, they will have a lot of more opportunities to use their classroom literacy learning outside the classroom setting. Consequently, studies of early literacy acquisition processes in L1 contexts may not be of complete relevance to FL learning. But, Studies of L2 literacy acquisition may have a greater relevance to FL learning, yet much of this research is focused on young children educated in immigrant or immersion settings. In these and most other L2 settings (e.g. post-British-colonial nations), English has a substantial societal presence beyond classroom walls (Bruthiaux, 2010). Thus, although L2 learners may not be fluent users of the language when literacy learning begins but at least, they are exposed to a wider range of the L2 outside of school than FL learners.

In a typical FL setting, the target language may be studied extensively (such as is often the case with English), but used little or not at all outside of school. In FL settings, learners are also under the influence of the native culture which may favour a distinctly different approach to language learning than the one promoted in school or by the target language native teacher. The native learning culture influences significantly how learners approach a new language and the learning

outcomes. In many Asian countries (e.g. Japan, China, Thailand and Iran), an examination culture exists that favours memorization over exploration (Phungphol, 2005; Forman, 2005; Jin & Cortazzi, 2006) and as a consequence, learners typically demonstrate low proficiency and communicative competence in English.

Obviously, the quantity and quality of language input that L2 and FL learners receive can differ greatly and that these differences are both sociocultural and cognitive. Nevertheless, studies conducted on early literacy development in L2 can be helpful in distinguishing the differences between L1 and non-L1 acquisition and might be directly relevant to FL learning depending on the particular sociocultural situation described. In fact, many of the young L2 learners begin L2 literacy with as little knowledge of the target language as young FL learners and, the same as FL learners, they are already speakers or even literacy learners of their native language. In such cases, the problems and challenges that these L2 learners encounter with are likely to be the same as their FL counterparts. However, due to the contextual differences, the literacy development of L2 and FL learners is likely to take a different path. As stated before, implications for FL learning can be drawn from studies of L1 and L2 literacy acquisition, but studies that deal specifically with young FL learners in their specific context are clearly more able to provide relevant insights into the processes involved in early literacy learning in a foreign language.

Unfortunately, there is a discernible absence of research on the early literacy development of young EFL learners. Theories regarding FL literacy development have evolved mostly from studies of native English speakers. Yet, given the influence of language knowledge, culture, L1, and ethnicity on literacy, the generalizability of research on L1 learners to FL learners is open to question. To gain a clearer understanding, it is necessary to bear in mind the following differences between L1 and foreign language learning/learners (adapted from Koda (2005) and Urquart & Weir (1998), as cited in Kuo, 2011, p. 72):

> 1) Foreign language learners have limited linguistic knowledge of the foreign language.
>
> 2) FL readers typically do not have a highly developed pre-existing oral vocabulary in the foreign language (Koda, 1996 & 1994).
>
> 3) Foreign language learning typically takes place under distinctly different conditions and in a setting different to that of L1 learning.
>
> 4) Foreign language learners already possess knowledge of one language, which may be orthographically very different from the foreign language.
>
> 5) Foreign reading instruction begins at a different point in the FL acquisition than reading instruction in L1.

The variables involved in FL literacy learning complicate its investigation. The differences indicate literacy learning in a foreign language may be linguistically, socially and cognitively distinct from L1 literacy learning. While the primary stages of L1 literacy acquisition mainly entails the mapping of existing knowledge and concepts onto print forms with meaning construction at its core, literacy learning in FL often involves learners learning the spoken form and semantic and syntactic knowledge as they learn the print form simultaneously, or just minutes or seconds before they learn the print form, hence there may be little existing knowledge. Therefore, for L1 learners, literacy learning is the learning of the writing system whereas for FL learners it is the learning of the writing system and the language. Laufer (1997) noted this distinction in stating that reading in a FL is both a reading problem and a language problem. It is obvious that an understanding of FL literacy cannot be obtained by simply extrapolating the conceptual and methodological precepts of L1 research without due regard for the dominant factors characterizing FL literacy (Koda, 2005; Berndthard, 2005; Urquart & Weir, 1998).

Any theories for FL reading and any adoption of literacy approaches must account for the effects of FL-specific linguistic and non-linguistic variables, particularly prior literacy experience, dual-language involvement, limited linguistic knowledge, and social context. Consequently, it is vital that research finds that most effective method for teaching literacy to EFL children which suits those specific characteristics of their learning context.

2.3. 'Reading Wars': The Great Debate between Phonics and Whole Language

Over the past century, there have been fundamental disagreements relating to both the theoretical and practical aspects of learning to read in English (Thompson, 1999). At the centre of these disagreements lies what Chall (1983, 1996) termed 'the great debate': a debate between those researchers and educators who place great emphasis on approaches that focus on breaking the code (bottom-up) and those who advocate instruction that relies on a meaning-emphasis (top-down) approach. In recent years, this dichotomy has seen its incarnation in the phonics and the whole language programmes, respectively (Adams, 1990; Allington, 2002; Burkard, 1999; Chall, 1996; Goodman, 1998; Kucer, 2001; Stanovich & Stanovich, 1995; Thompson & Nicholson, 1999).

Defining the term 'whole language' can be challenging, particularly in terms of instructional practices. This is partly because those most strongly identified with whole language have often resisted attempting to define it precisely; arguing that an approach that is whole cannot be easily reduced to parts (e.g. Goodman, 1989; Smith, 1994). Bergeron (1990) and Moorman, Blanton and McLaughlin (1994) attempted to clarify the nature of the whole language approach via an analysis and synthesis of journal articles on whole language. Both studies found, however, that there was little agreement among the contributors to the whole language literature

about the basic definition of the whole language approach, nor about the instructional techniques and strategies used. Some instructional elements and practices did show consistency. The majority of articles specified literature as important in whole language and de-emphasized the teaching of letter-level processes involved in decoding of text (i.e. there was no dedicated instruction in these skills) in favour of higher-order meaning construction, making meaning construction the primary goal in learning to read from the very start.

According to the whole language perspective, context cues and the schemata they trigger are crucial in comprehension; hence, written word recognition is portrayed as involving primary analyses of semantic cues and syntactic cues and to a lesser extent, grapho-phonemic cues (Weaver, 1998). Whole language oriented scholars cite as evidence for this the fact that when a reader misreads a word, the misreading typically can be explained as semantically related to the actual word, syntactically sensible, or graphophonemically related to the target word (Goodman, 1993).

In general, whole language emphasizes the importance of literature-based reading, purposeful meaning construction, the naturalness of reading acquisition, and child-centeredness in reading instruction (Bergeron, 1990; Edelsky, 1993; Goodman, 1989, 1996, 1998; Weaver, 1998). Instructional practice involves the provision of meaningful context within which letter strings are transformed by the learner into visual wholes that give direct access to the lexical meaning of a word. Success in word reading is based on frequent encounters with print (Perfetti, 1991).

Whole language advocates criticize an emphasis on the direct teaching of phonics, claiming that it turns reading from a process of making sense into one of sounding out words and that this interferes with the process of meaning construction by removing the language context and replacing meaningful language with the learning of an abstract system (Goodman, 1993). In general, whole language advocates hold a strong conviction that children can instead discover sound-letter regularities through authentic comprehensible reading and writing (Routman, 1996; Weaver, 1998) and that phonics should only be learned as a natural by-product of immersion in meaningful context rather than as a focal point of instruction. Beginning reading is treated more like natural learning, which is aimed at making use of the learner's world views, experiences, and insights to facilitate active construction of knowledge and rules (Spiro, 1980). Moreover, Goodman, Bird and Goodman (1991) claim that the ultimate aim of the whole language approach is to instil a love of literature and to promote critical thinking, collaboration, authenticity and personalized learning.

Advocates of phonics instruction argue that early alphabetic reading instruction must include some explicit training in letter-sound correspondences and patterns. Such 'bottom-up' theorists believe that to enable the powerful self-teaching mechanism inherent in an alphabetic language (Share, 1995), children must learn

the general principle that spellings correspond to sounds and that letter-sound cues are more important in recognizing words than either semantic or syntactic cues. In general, reading acquisition is seen as a linguistic information processing sequence (Stanovich, 1991; Sweet, 1997).

Despite the at times polarized debate, both the whole language and phonics approaches to teaching literacy share the same ultimate goal of enabling students to generate meaning from text independently and, contrary to some claims, rarely do proponents of phonics recommend teaching only phonics (Chall, 1989) nor do advocates of whole language deny the importance of letter-sound relationships. The focal point of contention is the means by which these relationships are learned: whole language advocates believe that the letter-sound system can be acquired through immersing children in print-rich environments and providing them with opportunities to write with invented spelling (Weaver, 1994) whereas phonics advocates underscore the importance of systematic and explicit skills instruction that focuses on facilitating letter perception, phonemic awareness, and word decoding skills (Adams, 1990; Beck & Juel, 1995; Chall, 1996; Stanovich, 1991; Sweet, 1997).

Many educators favour an integrated approach that supports both direct teaching of phonics as a 'system' and opportunities for implicit learning of letter-sound relationships through 'meaningful' whole language experiences (Pressley, 1998).The efficacy of the combined use of bottom-up and top-down approaches is also supported by research evidence (Hall, 2001).

Nonetheless, in an attempt to resolve the debate, some researchers have sought to compare students' literacy performance under phonics instruction with that of students under whole language instruction. Snow, Burns & Griffin (1998) noted that it is difficult and inaccurate to designate classrooms as specifically 'phonics' or 'whole language' classrooms. Hence, intervention studies have come to the fore (e.g. Bruck, Treiman, Caravolas, Genesee & Cassar, 1998; Stuart, 1999).

The results of the majority of these studies seem to indicate that phonics-trained learners are better at word reading and are more accurate spellers. However, advocates of whole language object to such relative effectiveness studies because of the belief that over-reliance on test score data promotes test-driven curricula (Edelsky, 1990). They also argue that many of the effectiveness tests do not include performance on tests of reading comprehension, which they consider the main goal of reading instruction (Krashen, 2002). Moreover, whole language seems to produce better outcomes with respect to some measures of reading readiness. Freppon (1991), for example, reported that students in whole-language classrooms understood much better than skills-based students that reading is about getting the meaning rather than simply reading the words (see also Dahl & Freppon, 1995). When students under phonics instruction sound out a word incorrectly when reading, they are less likely to notice that the word does not make sense and more likely to accept the misreading than whole language

students. In general, whole language students demonstrate better understanding about the nature of reading and writing (Graham & Harris, 1994), more autonomous use of literature, and better attitudes toward reading (Foorman, Francis, Schatschneider & Mehta, 1998; Morrow, 1992; Rosenhouse, Feitelson, Kita & Goldstein, 1997). The results of these studies appear to reflect the difference between a very targeted approach in which an identifiable set of letter-sound correspondences will be taught within an identified time-frame (phonics) and an approach that has no such short-term targets (whole language): testing knowledge acquisition after a (mostly short-term) intervention study would appear to suit the former and not the latter. Additionally, the relative absence of specific learning targets (and therefore stress in achieving those learning targets) in whole language may encourage a better attitude to literacy learning.

McBride-Chang (2004) and Stanovich (1986) noted that learners who have a greater interest in reading may persist with it for longer and may therefore perform better in the long run, yet it is difficult to judge the impact of the teaching approach on this interest and therefore on ultimate literacy achievement.

Adams (1990) referred to the debate between proponents of the two approaches as the 'reading wars', giving some indication of the vigour with which some contributors argued their opinion. In recent years, advances in cognitive science have led to the development of cognitive processing models of word recognition. These models have been forwarded as scientific evidence that phonological processing skills are related to reading and that such skills are best promoted through systematic teaching of phonics (e.g. Adams, 2002; Ehri, Nunes, Willows, Schuster, Yaghoub-Zadeh, & Shanahan, 2001; Seidenberg, 2005; Stanovich,1991).

Early studies of readers' eye movement by Javal in 19th century, suggested a new method of teaching reading and Huey used them to support whole-word teaching in his seminal work, *The Psychology and Pedagogy of Reading*, (1908). As it was believed that adult readers recognize words as wholes, many educators argued that children should be taught to recognize whole words. This became the dominant method between the wars (Burkard, 1999).

During the 1960s, Kenneth Goodman was busy formulating an entirely new theory of reading. Goodman dismissed mere word-identification as an optional by-product of the reader's search for meaning. In his influential essay, "Reading: A Psycholinguistic Guessing Game", he asserted that a reader's eyes move randomly over the page, sampling text in a cycle of prediction and confirmation of meaning. During the 1970s, Goodman's ideas attracted a lot of attention on both sides of the Atlantic, and he may fairly be considered the father of the whole language movement (Burkard, 1999).

In 1990, two books stopped the real books movement dead in the water. In Britain, an unknown educational psychologist from Croydon, Martin Turner,

published confidential reading test results from eight LEAs which proved just how bad the situation was; average attainment of seven year-olds dropped by seven months between 1985 and 1990. As most reading tests do not even show a reading age until around five-and-a-half or six years, it is clear that a decline of this magnitude is more than just unusual. In Sponsored Reading Failure, Turner laid the blame squarely at the feet of whole-language enthusiasts, and aptly described LEAs as "adventure playgrounds for ambitious educational professionals" (Burkard, 1999).

At the same time, the American researcher Marilyn Jager Adams published Beginning to Read: Thinking and Learning about Print, an exhaustive study of scientific research on reading. She concluded that there was no evidence to support Goodman's model of reading: all good readers can decode letters so effortlessly and automatically that it appears as though they are reading whole words. The fact that they can also read non-words, unfamiliar names, and neologisms without difficulty proves that they are in fact processing letters. Goodman's model of reading is only valid insofar as it describes the behaviour of poor readers who cannot decode very well (Burkard, 1999).

Almost overnight, the politics of reading changed. Whole-language texts started gathering dust in university libraries. Phonics was back in fashion. The issue now was finding the best way to teach it. Academically speaking, there is little doubt that the proponents of phonics have won the reading war. As the School Standards Minister pointed out in a Daily Telegraph interview on 23 February, 1999: it is remarkable that we have moved the debate away from "phonics or real books" on to a debate about how to use phonics within the space of 18 months. It is now generally accepted that children cannot be expected to learn to read without being taught to do so.

2.4. Understanding Reading and Spelling in English and its Pertinence to Phonics

Understanding how reading and spelling work in English may help in understanding the efficacy and limitations of phonics. That children are able to discriminate between homophones (e.g. *see* and *sea*) indicates that orthographic representations stored in the internal lexicon play a part in both reading and spelling (Smith, 1984; Massaro, 1984). In dual route theories (Coltheart, Curtis, Atkins & Haller, 1993), for example, orthographic processes are relied upon for recognition of familiar and high frequency words as these words are individually coded within the lexicon, whilst phonological processes are considered important for the recognition of low frequency and unfamiliar words because these words are generally not represented in the lexicon and must undergo letter-to-sound conversion. Thus, the ability to recognize a word requires that a reader has mastery of both the phonological system and the writing system of a given language as well as how these two systems interact (Gholamain & Geva, 1999).

However, it is important to note that the two processes do not often assume equal dominance. The amount of phonological or visual strategy which occurs during the process of word recognition is determined largely by the frequency of exposure.

Readers' degree of familiarity with print plays a role in determining strategy use. With familiar or high frequency words, the strength of the connections between the orthographic representation and their lexical entries allows direct visual access to meaning without phonological recoding. In contrast, low frequency or unfamiliar words in all languages appear to undergo phonological recoding to a certain extent (Besner & Smith, 1992; Hirose 1992). This frequency effect, which allows direct visual access, is the result of print experience (Martin, Pratt & Fraser, 2000). Naturally, the more frequently a reader connects a printed word with its meaning, the stronger the direct links between the orthographic representation of the word and its meaning will become and the more automatized the process will be. It is generally acknowledged that reading shifts from a greater reliance on phonological skills, when very few written words are known, to a greater reliance on orthographic skills, as the written vocabulary expands (Martin et al., 2000).

This relationship between frequency of exposure and automatic print word recognition has generated some of the issues involved in debates of literacy pedagogy, particularly on reading materials for beginning learners. In the US for example the most popular basal texts published between 1910 and 1985 adopted a high-frequency-word approach (Graves, Juel & Graves, 2001). Because of the tightly controlled vocabulary, the language appeared to be stilted and unnatural and consequently was criticized by advocates of literature-based and whole-language approaches who favoured 'authentic' realistic natural sounding language (Graves et al., 2001).

Current basal texts include more varied vocabulary. These texts are also open to criticism, however, as learners may not encounter the same words frequently enough to enable automatic recognition. The dual-route theory can also be applied to spelling: an orthographic or 'lexical' route accesses word-specific memory and retrieves complete spellings, whereas a phonological or 'assembled' route maps sounds and letters to produce spellings for unfamiliar words (Barry, 1994). It has to be pointed out that though the dual-route model is used to explain both the reading and spelling processes, there are intrinsic differences between the two processes. In reading, the development of pattern recognition mechanisms related to visual features of words is crucial, whereas spelling depends on the permanent storage of information regarding component letters and their sequence (Henderson & Chard, 1980; Treiman & Bourassa, 2000). A partial analysis of visual orthographic structure is often sufficient for word recognition, whereas for spelling the full letter-by-letter sequence must be produced. Hence, in order to spell a word correctly, higher demands are made upon orthographic representations than in reading. English may put a particularly high demand on

orthographic memory in spelling as there are generally more possible spellings for a particular word than possible readings.

Stone, Vanhoy and Van Orden (1995) estimated that 69% of low-frequency English one-syllable words are letter-to-phoneme consistent whereas 72% are phoneme-to-letter inconsistent. This is not to say, however, that sound-letter knowledge plays a lesser role in spelling than in reading. In fact, whereas the extent to which phonological recoding is used by a reader to achieve identification of familiar print words remains an issue of debate, there is abundant evidence suggesting that phonological processing is the crucial factor in spelling (Brown & Ellis, 1994; Kreiner, 1992; Wade-Wolly & Siegel, 1997). It is also clear that the ability to segment, blend, and manipulate the phonemic structure of words is a necessary precursor to reading acquisition, but not the only requirement (Castle, 1999).

Another issue with the dual-route theory is that although it has been utilized in a number of reading / spelling models (e.g. Ellis, 1984; Kreiner, 1992) and is supported by both behavioural and neuropsychological evidence (e.g. Barry &Seymour, 1988; Kreiner & Gough, 1990; Perry & Zieger, 2004), whether orthographic and phonological processing can be operated separately or whether they are so intricately linked that the operation of one activates the other remains unresolved (Hagiliassis, Pratt & Johnston, 2006). A modern dual-route theory, the connectionist model of reading and spelling, proposes that grapheme to phoneme conversion goes on in parallel with lexical look up, with the two sources of information competing or converging to various degrees (Seidenberg, 2005). The fact that spelling errors among good and poor spellers are phonologically plausible is given as evidence that phonological processing contributes also to the spelling of familiar words (Treiman, 1994).

2.4.1. The Requirements of Reading and Spelling in English

The models of reading and spelling reveal what assumptions are made of prerequisite knowledge and abilities. First, since models focus largely on the interface of spoken sound and print, they must assume that readers / spellers know the language sounds. A learner should also be able to reflect on and manipulate the phonological segments of speech (phonological awareness) (Wagner & Torgesen, 1987), store phonological information in working memory and retrieve that information, and access and retrieve verbal labels for visually presented stimuli (Wolf & Bowers, 2000). In addition, he should be able to form, store, and access knowledge about permissible letter patterns (grapheme knowledge) as well as having an awareness of the general attributes of the writing system (Vellutino, Scanlon, & Tanzman, 1994).

To date, research seems to suggest that whereas phonics instruction facilitates the phonological skills, the application of visual strategies contributes to the acquisition of orthographic knowledge (Gholamain & Geva, 1999), though how

exactly orthographic knowledge is acquired through visual strategies, i.e. whether by rote, analogy, or rule, awaits specification. It is generally accepted that the dominant use of either phonological or orthographic strategies may result in marked individual divergences in reading / spelling behaviour. Baron, Treiman, Wilf and Kellerman (1980), for example, classify people into 'Phoenicians,' who are good at spelling by letter-sound rules, and 'Chinese,' who are not. Connelly, Rhona, Johnston and Thompson (1999) concluded that strategy use is influenced by the type of instruction received and that children under phonics instruction are more likely to use phonological skills to read and spell. Because studies of reading and spelling processes have focused largely on the interface of spoken sound and print, the role of visual perception and semantic knowledge has received relatively little attention.

Furthermore, the study of spelling and reading processes has been dominated by studies of L1 learners of English, and therefore the learner- and language-specificity of the associated processes (i.e. whether L2 and EFL learners adopt the same processing strategies and whether the same processes apply to other languages) remain largely uninvestigated. It is also important to note, once again, that cognitive processes in word-recognition are only one aspect of literacy acquisition. After synthesizing hundreds of research articles in the US government-sponsored report *Preventing Reading Difficulties in Young Children*, Snow, Burns and Griffin (1998) noted that adequate progress in learning to read in English encompasses five areas for development; decoding, fluency, background knowledge, comprehension monitoring, and motivation. To make more informed pedagogical decisions, the intricate links between language, context and motivation need also to be considered.

2.5. Different Approaches to Phonics Instruction

Given that phonics instruction is highly correlated with the success of early literacy acquisition (Adam & Bruck, 1995; Eldredge, 1995), this section focuses on which current approach to phonics is most effective. A large number of phonics teaching methods have been put into practice to promote students' reading and spelling skills in English as a first language, second language and foreign language learning environments (Sheu, 2008). Despite the varieties of the approaches, these approaches are generally put into two broad categories: Analytic and synthetic phonics.

2.5.1. Analytic Phonics

Analytic phonics which is also known as implicit phonics instruction is a whole-to-part approach (Dakin, 1999; Eldredge, 1995), which emphasizes that students rely more on the contextual clues to figure out the letter-sound corresponding rules. Proponents of this approach perceive "meaning as the major focus of reading instruction and believe that "meaning is deemphasized" when students put too much focus on decoding (Eldredge, 1995). In implicit phonics

teaching classrooms, teachers usually read story books to students and students understand words through pictures and context. After students have recognized a number of commonly used words, those words are analysed with the shared similar sounds among those words identified along with the letters that represent them (Sheu, 2008).

While implicit phonics approaches do not ignore the letter-sound relationship, they do not emphasize segmenting or blending letter sound. Students learn words as whole first, such as cat, cake, camp, and then the teacher guides them to look for the similarities of the initial sound [k] and make association with the first letter *c*. in short, phonics is taught by analysing known words to learn about their discrete parts (Sheu, 2008).

However, there are two pitfalls for the implementation of analytic phonics. Beck and Juel (1995) argued that students might fail in inducing distinctive sounds among the words with the lack of segmentation skills. In addition, for the instruction to be effective, it could take up to three years of training process (Watson & Johnson, 1998). Therefore, the attention of educators and researchers are mostly drawn to synthetic phonics.

2.5.2. Synthetic Phonics

On the contrary, synthetic or explicit phonics instruction is a part-to-whole approach (Dakin, 1999). It is based on the premise that children should master decoding first when learning to read (Eldredge, 1995). Explicit phonics instruction focuses on the direct and systematic teaching of the letter sound knowledge and training of the phonological awareness skills, such as blending and segmentation. In short, the teacher who applies explicit phonics teaching in the classroom first introduces the students to blend the sounds together to read or instruct them to listen for the discrete sounds in a word (Sheu, 2008).

This is what happens in an explicit phonics teaching classroom. The teacher starts with introducing the letter *c* on the blackboard and has students chant out the sounds of letter *c* as [k], letter a as [æ], letter *t* as [t]. Next, the teacher demonstrates a picture word card of *cat*. Then, the teacher demonstrates the blending skill vividly to students by making the hand folding gesture (Hu & Kai, 2000) as she points to the letters *c a t* from left to right, synthesizing the sounds [kæt]. In addition, the teacher trains students with segmentation skills; for example, students listen for discrete sounds in the word *cat*, with one letter covered, by figuring out which is the correct letter representing that sound.

However, Beck and Juel (1995) pointed out one potential problem with explicit phonics instruction. They noted that some consonantal sounds could not be produced in isolation without adding a schwa [ə], such as the isolated sound of letter *b* in *but* is distorted to [buh]. Yet Beck and Juel (1995) concluded that teaching students to isolate sounds still offer an advantage when it was done in

moderation and combined with explicit blending instruction. Furthermore, this approach could be taught in a few months (Watson & Johnson, 1998; Watson & Johnson, 2005). Moreover, the majority of the researchers advocate the positive effects of synthetic phonics on children's literacy development. In their article *Resolving the "Great Debate"*, Adams and Bruck's (1995) argued for explicit phonics approach over the whole language approach, proposed that "explicit and direct attention to phonics supports reading and spelling growth better than opportunistic attention to phonics while reading" (p.17). In addition, Beck (2006) in her book *Making Sense of Phonics: the Hows and Whys* provided three anecdotes concerning the reading skill of a previously taught firs-grade class, army sergeants, and her own children. She found that for the 3 groups of learners to become successful readers, they needed to be explicitly and systematically instructed on the letter-sound relationship, segmentation and blending skills at the early stage of learning to read.

In addition to that, empirical research in the context of L1 and F/S L support the use of synthetic phonics as the best method of teaching English literacy. Sumbler and Willows (1996) compared the effects of synthetic phonics teaching with the effect of whole language/phonic eclectic method in 20 first-grade classes in Canada. They observed the amount of time that individual pupils spent on ten different activities over a period of six months. Out of those 10 activities, only two of them which were to a great extent associated with synthetic phonics were highly correlated with success in reading and spelling. These two were: phonics (which included all letter-sound correspondences, blending, segmenting, detecting sounds in words) and letter formation (which involved talking about the shapes of letters, writing letters and words in context of learning letter-sound relationships). Beyond this correlational data, it was found that at the end of six months, the different emphasis the synthetic and eclectic classes gave to each of these various activities added up to produce startling differences in achievement. The synthetic phonics classes significantly outperformed the eclectic classes on 16 out of 19 reading and spelling measures. The results showed that the eclectic classes had not learnt how the alphabetic code works and were not able to decode phonemically. The eclectic classes displayed a one standard deviation discrepancy between reading real words and decoding non-words, pointing clearly to their reliance on sight word memorization.

Bowey (2006) claimed that both the New Zealand Ministry of Education's Literacy experts group and the Australian National Inquiry into the Teaching of Literacy had acknowledged the centrality of systematic instruction in synthetic phonics to early reading instruction. In his paper "Need for systematic synthetic phonics teaching within the early reading curriculum", he supported the inclusion of synthetic phonics instruction in early reading curriculum relying on empirical research in basic psychology and evidence-based evaluation studies.

One of the studies mentioned in Bowey's article was the large-scale evidence-based evaluation of early reading instruction commissioned by the U.S Congress

from the National Reading Panel comprising 14 prominent researchers (Ehri, Nunes, Stahl et al., 2001). Ehri et al. (2001) assessed the effectiveness of reading instruction programmes by averaging across all reputable evaluation studies using a well-known statistic as effect size. The results showed that averaged across all studies, the synthetic phonics instruction produced an effect size of 0.45 which was very significant.

As Bowey (2006) points out, these findings are supported by more basic research in the psychology of reading:

> "The critical point about alphabetic writing systems is that they represent linear transcription of spoken language, sound by sound (or phoneme by phoneme). This is what is known as alphabetic principle. Because alphabets represent sound, all words can be transcribed and decoded. When letters symbolize phonemes, skilled readers can read-phonologically decode-totally unfamiliar printed words through recoding print into sound. Mastery of alphabet reading entails the ability to use letter-sound correspondences to pronounce unfamiliar items from scratch and provides the learner with what has been called a "self-teaching device" (Share, 1995).

He further explains that synthetic phonics instruction provides the children with the key to unlock the door by introducing only the most common letter-sound correspondences. Children will figure out the rules and do the rest by themselves. Bowey (2006) introduces Jolly Phonics (Lloyd, 1992) as a carefully developed synthetic phonics programme in which letter-sound correspondences are introduced in the most useful way.

Shue (2008) investigated the effects of explicit phonics instruction on the phonological awareness (such as the awareness of letter-sound knowledge, blending and segmentation skills) development of 34 second-graders in Taiwan. The treatment lasted for over a semester (approximately 200 minutes) of intensive training using a quasi-experimental design. The findings revealed that the participants' overall phonological awareness skills had improved especially those of the low-achievers. Furthermore, the subjects had greatly improved in the VC blending task and the phoneme segmentation task.

Kodae and Laohawiriyanon (2011) examined the efficacy of intensive explicit phonics instruction on reading and spelling attainment of Thai English language learners with reading difficulties. Forty-one 5-graders in a primary school in Thailand participated in this study. The training was given one hour per day within 8 weeks. A one-group post-test and retention test design was used to collect data. The results suggested that both middle and low-achievers benefited from the programme specifically in relation to word recognition ability.

2.5.2.1. The Special Demands of English Literacy Learning and Mixed Results about Synthetic Phonics Instruction

Understanding the particular demands made by a language like English is crucial for the successful early teaching of literacy in English. The Rose Report (2006) commissioned by the Secretary of State for Education in England, recommended that early reading instruction must include synthetic phonics.

However, Wyse and Styles (2007), Goswami (2007), and Wyse and Goswami (2008) argued that the action taken by the UK government to change the national curriculum in line with the Rose Report's recommendations must be reconsidered. They justified their claims by proposing that the Rose Report is not proved by research evidence and that special features of a language regarding literacy acquisition must be taken into account before selecting the method for teaching literacy.

The study of reading acquisition across different languages illustrates that there are two major constraints on the acquisition of efficient phonological recoding skills (Ziegler & Goswami, 2005). One is the phonological complexity of the language. Children acquire phonological recoding skills much faster when the phonological structure of their language follows a simple consonant–vowel (CV) structure. Languages with a simple CV syllable structure include Italian, Spanish and Chinese. The second constraint is the consistency of the symbol-to-sound mapping (Ziegler, Stone, & Jacobs, 1997). In some alphabetic orthography, one letter or letter cluster can have multiple pronunciations (e.g. English, Danish). In others, it is always pronounced in the same way (e.g. Greek, Italian, Spanish). In some alphabetic orthographies, a single speech sound (phoneme) can have multiple spellings (e.g. English, French, Hebrew). In others, it is almost always spelled the same way (e.g. Italian). In Chinese, there may be as many as eight choices of Kanji character to represent one sound. English is an exceptionally inconsistent alphabetic language because it suffers from a large amount of inconsistency in both reading and spelling. It is relatively easy to learn about phonemes if one letter consistently maps onto one and the same phoneme, or if one phoneme consistently maps to one and the same letter. It is relatively difficult to learn about phonemes if a letter can be pronounced in multiple ways (e.g. the letter "A" in English maps onto a different phoneme in the highly familiar words "cat", "was", "saw", "made", and "car").

The above mentioned assertions were based on a large-scale cross-language reading comparison conducted by the "European Concerted Action on Learning Disorders as a Barrier to Human Development" in 2003. Participating scientists from 14 European Community countries developed a matched set of items of simple real words ("ball", "boy") and non-words ("dem", "fip"). These items were then given to children from each country during their first year of reading instruction (for details, see Seymour, Aro, & Erskine, 2003). The idea was to equate the children for the degree of reading instruction received across

orthography. This meant that the children varied in age; for example, the children learning to read English were aged 5 at the time of testing, whereas the children learning to read Finnish were aged 7.Although method of reading instruction itself could not be equated exactly, schools were chosen so that all children were experiencing phoneme-level "phonics" teaching (the participating schools contributing the English data were in Scotland).

The data were striking. Children who were acquiring reading in languages with consistent spelling systems (Greek, Finnish, German, Italian, and Spanish) were close to ceiling in both word and non-word reading by the middle of first grade, irrespective of age. English-speaking children performed extremely poorly (34% correct for words, 29% correct for non-words), and even after two years of instruction were poorer in accuracy than children learning to read consistent spelling systems (Scottish children in second grade scored 76% correct for words and 64% correct for non-words).

The evidence from these studies is that learning to read English is a more difficult learning task than learning to read Finnish, Spanish or Italian. This makes it inherently unlikely that one method of teaching phonics will suddenly cause English children to perform like Finnish children. For English, some words have to be learned as distinct patterns (e.g. "choir", "people", "yacht"), because they have no orthographic neighbours at all. Other words, such as "light", contain rime spellings that are common to many other words. Still other words are quite consistent for letter–phoneme recoding ("cat", "dog", "pen"), and are easily recoded by synthetic phonics (Goswami, 2005).

As stated by Wyse and Style (2007), these unclear results about the efficacy of synthetic phonics for teaching English literacy is also supported by some empirical research studies. One of the most significant contributions to debates about research evidence and the teaching of reading was the report of the US National Reading Panel (NRP) on reading instruction, carried out by the National Institute of Child Health and Human Development (2000). This extensive meta-analysis addressed a number of questions including: ''Does systematic phonics instruction help children learn to read more effectively than non-systematic phonics instruction or instruction teaching no phonics?'' (Chapter1, p.3). As far as differences between analytic and synthetic phonics are concerned, the NRP concluded that ''specific systematic phonics programmes are all significantly more effective than non-phonics programmes; however, they do not appear to differ significantly from each other in their effectiveness although more evidence is needed to verify the reliability of effect sizes for each programme'' (National Institute of Child Health and Human Development, 2000, chapter 2, p. 93). The point about systematic phonics, as opposed to synthetic phonics, is contrary to the Rose enquiry's conclusion that the case for systematic phonics is much strengthened by a synthetic phonics approach.

Furthermore, England's Department for Education and Skills (DfES) commissioned a systematic review of approaches to the teaching of reading. The methodology of the NRP was refined to produce a meta-analysis that included only randomized controlled trials (RCTs). On the basis of their work, Torgerson et al. conclude, once again in direct contrast to the Rose enquiry, that ''There is currently no strong RCT evidence that any one form of systematic phonics is more effective than any other'' (2006, p. 49).

Moreover, Foorman, Francis, Winikates, Mehta, Schatschneider and Fletcher (1997) carried out a study comparing the effectiveness of synthetic and analytic phonics on children with reading disabilities concluding that 'synthetic phonics facilitates skill in phonological analysis relative to analytic phonics and sight-word methods, but this facilitation does not appear to transfer to gains in word reading'' (p. 272).

The various studies by Landrel (2000), Walton, Walton and Felton (2001), and Spencer and Hanley (2003) all reach the same conclusion that no one method of teaching phonics to children learning to read in English appears to be superior to any other method. This is exactly the same conclusion as was reached by the meta-analyses reported by the NRP and by Torgerson, Brooks and Hall (2006).

Meanwhile, cross language data offer some insights into why English is a relatively difficult language to learn to read. These insights are very useful for the teachers of phonics. The first is that English syllables are phonologically complex, and this matters for children's ease of learning. English does not follow a simple CV syllable structure, and so learning to segment words into phonemes is difficult, and onset-rime skills are important. The second is that English orthography is very inconsistent. This is why phonics tuition should not focus exclusively at the grain size of the phoneme. Further, words like *yacht* need to be learnt as holistic patterns. In order to optimize the teaching of early reading in English, we need to take all of these factors into account. The design of instructional programmes for recoding visual symbols into sounds needs to reflect the cross language empirical evidence base (Goswami, 2007).

Wyse and Styles (2007) argue that the conclusion of the Rose Report, that teachers and trainee teachers should be required to teach reading through synthetic phonics, ''first and fast'' is wrong. In the light of this, they claim that there is a pressing need for the government's requirements and guidelines for early reading to be subject to further critical scrutiny in the hope that a more balanced approach to reading may once more prevail.

As it can be gathered from the assertions in this section, due to the phonological complexity and the irregularity of English writing system, we cannot jump into a firm conclusion that the synthetic phonics instruction will produce incredible results in literacy acquisition the same as what it does in other languages with consistent spelling systems such as Finnish, Italian, Greek, etc.

However, as it was pointed out in the previous section (2.5.2.), there have been lots of studies in the literature that have verified the successfulness of synthetic phonics in teaching English literacy. These mixed results about the efficiency of synthetic phonics teaching indicate the need for further research in this area.

2.5.3. Multisensory Phonics Instruction

Although the main approaches to phonics instruction are generally categorized into analytic and synthetic phonics, looking at phonics from some other aspect, multisensory phonics can also be a category for itself. In most cases, beginning readers will be taught different strategies using body movements, songs and rhymes in order to memorize the alphabet or learn phonics (Ureno, 2012). Using a multisensory teaching approach means helping a child to learn through more than one of the senses (Bradford, 2008). Teachers unknowingly have always used methods to teach initial readers that require the different senses including sight, hearing, touch, taste and even smell (Greenwell & Zygouris-coe, 2012).

According to Cameron (2001), children have to make links from meaning to what they see (printed text), what they hear (the spoken language) and what they produce (written words) in learning to read and write. To assist the building and strengthening of all these various sorts of mental connections, she recommends teachers to use a range of modes and senses. Cameron believes that early literacy activities can provide opportunities for children to see, hear, manipulate, touch and feel. For instance, she suggests that if children are learning the letter shape *S,* as well as practicing writing the shape, they need to see the shapes on display in the classroom and in their books. She puts forward some creative techniques for putting these claims in to practice as: "The kids might cut out examples of letter *S* from newspapers and magazines and make a collage of them. They might paint, trace, colour in, join the dots, use modelling clay to make the shape; they can draw the shape in a tray of sand, or make shape with glue on a card sprinkle sound over to make a 'feely *S*'. They can be asked to visualize the shape in their minds and to imagine drawing the shape. They can make the sound /*sss*/, long and short, with different emotions: A happy /*sss*/ and a sad /*sss*/" (p, 142).

Multisensory instruction received its name because all information was presented via sight, sound, voice, and kinesthetic means. Multisensory phonics have long been touted as being effective for students with special needs such as the hearing impaired or deaf students, dyslexic children, disabled or poor readers, and underachievers. Since the greatest success for children with reading problems have mostly come from explicit instruction, multisensory instruction has also employed synthetic phonics instruction as one of its major components (Mohler, 2002).

Gaskins, Downer, Anderson, Cunningham, Gaskins, Schommer, and the teachers of Benchmark school in Pennsylvania (1988) created a new multisensory programme for teaching decoding to poor readers in grades 1through 8. The goals

of this supplemental teacher directed programme was to teach students use known words to decode unknown words, to see how English language is organized, to be flexible in pronouncing words, and to demonstrate automaticity in decoding. Preliminary evidence suggested that the programme turned out to be successful in improving students' decoding skills.

Mohler (2002) explored the effects of direct instruction in phonemic awareness, multisensory phonics, and fluency on comprehension, word recognition, phonemic awareness, spelling, and oral reading fluency on 25 low-ability, high risk seventh grade students in Nebraska. Forty three minutes per day were devoted to this instruction over the course of a year. Based on the results of the study, recommendations were made to incorporate this programme into the curriculum of low ability middle school students.

Salfer (2006) examined the efficacy of a multisensory reading programme on literacy improvement of kindergarten students in Ohio. Ten academically at-risk students participated in this study. Results showed that the intervention programme fulfilled the following objectives: Students were able to identify lower case letters by pointing ,and naming lower case letters, correctly articulate the sounds of lower case letter, and form letters properly 90% or better after twelve weeks of classroom instruction. The target students improved their score of twenty five percent on the DIBELS mid-year assessment.

In 2007, Donnell also conducted an experiment in which she tested the effects of multisensory instructional methods in 450 underachieving third grade students in Kansas City. The study consisted of using 60 whole-class multisensory word study lessons for third grade students; each of the lessons took approximately 20 minutes for a total of 20 hours instruction inside the classroom. The multisensory features of the word-study lessons were both receptive and productive, with auditory, visual, and kinesthetic components (Donnell, 2007). The collected data supported the effectiveness of the multisensory word-study programme as a whole-class intervention in increasing decoding ability, in developing the ability to correctly encode common phoneme–grapheme spelling patterns, and in increasing automaticity in application of the alphabetic principle through word-reading speed while reading in connected text. Using this multisensory approach with the urban third graders ultimately was successful in increasing all aspects of reading instruction, including comprehension. The lesson plans left behind were proposed as a strategy that teachers could use inside their classrooms to promote and develop levels of reading accuracy.

Trezek, Wang, Woods, Gampp and Paul (2007) conducted a study in which they investigated the effect of multisensory visual phonics on reading improvement of deaf and hard of hearing children. The participants were 20 students with various degrees of hearing loss in kindergarten and first grade in the State of Ohio. Results of the investigation revealed that after 1 year of instruction,

the students demonstrated statistically significant improvements in beginning reading skills as measured by standardized assessments.

A recent study conducted by Folakemi and Adebayo (2012) investigated the effects of multisensory in comparison to metacognitive instructional approaches on vocabulary of underachieving Nigerian secondary school students. The multisensory approach was tested against the metacognitive instruction approach on vocabulary amongst 120 students, 60 male and 60 female. The students were separated into four levels of independent and dependent variables of treatment and control. The researchers used a variety of tests to collect data for the investigation. The results indicated that the multisensory instructional approaches had significant effect on spelling achievement of the underachieving students. It was noticed throughout the experiment that although the less able students were still fully capable of learning, they had difficulties and all too often gave up easily and soon became disillusioned. The interest in using a multisensory approach to combat underachieving students stemmed from noticing not only the teacher's dull attitude, but in the student's attitude toward traditional instructional approaches. Most teachers have failed to see the importance of using teaching aids, which can be used for presentation, practice, revision, and testing in the ESL classroom. Students' interest is killed because they are bored with the traditional 'talk and board' teaching approach (Folakemi& Adebayo, 2012).

Van Staden (2013) evaluated an intervention of using sign language and multisensory coding on word learning and reading comprehension of deaf children in Bloemfontein, South Africa. Sign language in combination with multiple visual, tactile and kinaesthetic coding strategies and reading scaffolding techniques was used to facilitate literacy and vocabulary development. Participants were 64 children with severe to profound bilateral hearing loss and the mean age of nine randomly assigned to an experimental and a control group. Findings demonstrated significant increase in reading and vocabulary skills of deaf readers who received the intervention compared to the control group that received usual classroom instruction.

Much like special needs students, students who are English language learners can have a particularly difficult time when it comes to reading and literacy. Their abilities can range from beginning to intermediate; but even advanced students still need to master a new language, which can come from the help of an instructor (Pearson & Gallagher, 1983). According to Schneider and Evers (2009), teaching strategies for working with English language learners are essential for today's educators because they are at risk for failing curricular and standardized school requirements because of their limited English proficiency. Teaching strategies that can be beneficial to English language learners is to adopt a multisensory method to reading instruction.

In 2009, Schneider and Evers conducted a study in which they worked with several English language students who were speaking German, Hebrew and

English as a second language while testing multiple multisensory structured language (MSL) teaching strategies. According to the researchers, the MSL strategies are evidence-based and can be applied to any language as well as are supported by a variety of teaching resources to assist instructors in helping English language learners improve their English language skills (Schneider & Evers, 2009). The first step of the programme included the multisensory stage in which students were taught to use auditory, visual and tactile-kinesthetic methods in their reading instruction.

The next steps include fostering a linguistic awareness, practice and repetition, sequential les-sons, connecting prior knowledge and assessment. Within the first step, the MSL method included many multisensory strategies that were extremely hands on. For instance, in one lesson, the teacher took out a mirror and used it to demonstrate how the tongue, teeth, lips, nose and vocal chords produce various sounds when different patterned words were said. This technique allowed them to understand concretely an otherwise abstract concept (Schneider & Evers, 2009). In another lesson to teach comprehension, the teacher guided students through a book and out-lined main ideas, characters and the setting on different coloured sticky notes. These notes were then categorized into different graphic organizers and flow charts. The visual representation of this lesson allowed students to use a multisensory approach to reading comprehension while classifying the information properly in the text they just read. The research conducted by Schneider and Evers (2009) found that MSL instruction in combination with a cross-linguistic understanding showed promise for struggling ELLs.

The use of multisensory approaches to reading and literacy instruction has proven not only beneficial but also pleasantly stimulating for students as well. The approach is especially valuable for students that are underachieving or have special needs; in which these types of students may have more learning ability obstacles than their peers. Multisensory lessons will prove useful to any population in order to help achieve the desired goal of any unit. Moreover, educators can also gain positive experiences from using multisensory methods with their students to insure an interactive, fun and beneficial alternative to traditional teaching of reading and literacy. Using Multisensory Methods in Reading and Literacy Instruction Learning how to read is the foundation of elementary education in which all young children will either learn with ease, or with difficulty and hesitation. Reading requires the memorization of phonemes, sight words and high frequency words in order to decode texts; and through active experiences, children construct their understanding of the world (Gunning, 2009). Being active learners in the classroom can come from many methods such as hands on, musical or a kinaesthetic approach to instruction.

The benefits of using a multisensory approach to reading and literacy instruction have been made evident in studies focusing on special needs, underachieving and regular education students. Additionally, there are many experts that claim a multisensory approach works for beginning readers and in

secondary education as well. Although there is research that supports these claims, the topic regarding multisensory techniques is still fairly uncharted within several areas of the world and needs to be examined and shared more prolifically with other educators (Ureno, 2012). She further concludes that multisensory instruction is beneficial for all types of students in not only early education, but throughout secondary education as well. Based on her observations, Ureno claims that below grade level students in the beginning of the year come into the fall semester not knowing how to identify the alphabet or even hold a pencil. By spring, the same kindergarten student is writing multiple idea sentences with excellent penmanship. This progress stems heavily from using multisensory based lesson plans and methods to teach reading and literacy instruction. Research has found phonological awareness skills in preschool and kindergarten to be one of the most robust predictors of early reading success in a child's first few years of formal schooling (Callaghan & Madelaine, 2012). If a child can use several senses in order to develop and enhance certain phonological skills mentioned, his or her success regarding the curriculum they will encounter will be unlimited (Ureno, 2012).

2.6. An Introduction to Jolly Phonics Programme

In this section, a detailed description of the JP programme by Jolly (2012) is provided. Jolly Phonics is an in-depth foundation for reading and writing. It uses the synthetic phonics method for teaching the letter sounds in a fun and multisensory way. This method teaches children how to use the letter sounds to read and write words. The five basic skills which are covered in Jolly Phonics are:

1. Learning the letter sounds
2. Learning letter formation
3. Blending
4. Identifying sounds in words
5. Spelling the tricky words

1. Learning the letter sounds

In Jolly phonics, the 42 main sounds of English are taught in addition to the alphabet. The sounds are divided into seven groups. Some sounds such as ai,ee,or are written with two letters. These are called diagraphs. Among these diagraphs *oo* and *th* can make two different sounds, respectively as in *book and moon*; and *that and three*. These kinds of diagraphs are presented in two forms for the ease of distinguishing between them. This is demonstrated below:

1. s, a, t, i, p, n
2. c k, e, h, r, m, d
3. g, o, u, l, f, b
4. ai, j, oa, ie, ee, or
5. z, w, ng, v, oo, oo
6. y, x, ch, sh, th, th
7. qu, ou, oi, ue, er, ar

Each letter sound has an action and is introduced through a story and a song. This can help children to remember the letters that represent the relevant sounds. This multisensory approach offer children movement, sight, hearing and speech to help them remember. When there is a physical activity involved, young children learn more quickly. (To see the actions, see appendix 1.) Merely, introducing the letter sounds will not guarantee children's learning. The teaching of the letter sounds should regularly be revised. The revision can be done by using the flashcards or writing the letter sounds on the board. Children look at the letter sounds on flash cards or the board and say their sounds as well as doing the actions. As children gradually become to master the letter sounds, occasionally they should be asked to say the letter sounds without doing the actions. Children should learn the letter sounds by their sounds not their names so as to avoid confusion. For instance, the letter *a* should be called *a (as in ant)* not *ai (as in*aid). The learning of letter names can follow later.

In jolly phonics, the letters are not introduced in alphabetical order (as was shown in the aforementioned box). Rather, they have been ordered attentively so as to aid children's learning. For example, the first group (s,a,t,i,p,n) can make it possible for children to form very simple three-letter words such as: pin, pan, tip, sat from the very early stages. Also, the letters which are usually confused such as *b* and *d* are introduced in separate groups. The *c* is taught early on because it forms the model for writing the letters *a, d,o,g,q*. The sounds which have more than one way of being written are firstly introduced in one form only. For example, the sound *ee (seed)* is taught first and then its alternatives such as *ea (leaf)* follow later. (To see the alternative vowel spellings, see appendix 2.)

2. Learning letter formation:

It is of great import that children hold their pencil in the correct way. If a child's early pencil hold starts in a wrong way, it will be very difficult to be

corrected later on. The pencil should rest between the thumb and first two fingers in a 'tripod' grip. Young children enjoy the idea of their fingers likened to 'froggy legs' which moves the pencil backwards and forwards.

A child also needs to learn the correct way of forming each letter. Since the letter *c* forms the basic shape of some other letters such as *b* and *d*, it is introduced in the in the early stages. "Particular problems to look for are:

- The *o* (the pencil stroke must be anticlockwise, not clockwise),
- *d* (the pencil starts in the middle, not the top),
- There must be an initial stroke on letters such as *m* and *n*.

The multisensory approach adopted in Jolly Phonics helps the children to learn more easily by introducing the formation of each letter in the following ways:

1. The teacher shows the formation on the board.

2. The teacher shows the letter formation in the air. The children saying the sound hold up their fingers and follow the teacher's movement simultaneously.

3. The lines of dotted letters in Pupil Books and big arrow letters in the Finger Phonics Books guide children to follow the correct direction while writing the letters.

Joined-up or cursive hand-writing is encouraged from the early stages. This will improve children's fluency of writing and spelling. Writing the words in one movement makes it easier for children to remember the spellings. It also shows them how the letters join together and reminds them that sometimes two letters are needed to make one sound. However, teaching cursive hand-writing depends on the schools' and institutes' policies. In some schools teaching joined-up handwriting is not allowed in primary levels.

3. Reading (blending)

Blending which is sometimes referred to as synthesizing is the process of saying the individual sounds in a word and then mixing them together to make the word. That is why Jolly Phonics is known as a "synthetic phonics programme". For example, sounding out *s-u-n* and making *sun*. This ability enables children to read unseen regular and sometimes even irregular words. The Letter Sounds Book and Pupil Books are very suitable to start blending practices. Children can blend and read the words on the pages of Letter Sounds Book and then use the talking pen to check whether they have read the words correctly. Moreover, lists of appropriate words for further practice are provided in the Jolly Phonics Word Book and the Phonics Handbook. The flash cards such as regular word blending cards can also be helpful here. Teaching blending skills will particularly help

children with reading the sounds (diagraphs) that are presented by two letters such as *ch* and *sh*. Children learn to sound out the diagraphs as one sound, e.g. *ch* not individual letters like *(c-h).* Children are also taught to distinguish between the initial/final blends and diagraphs. In a blend like *pl*, the two sounds can be heard, but in a diagraph like *ch,* it is not the case. (To see initial and final consonant blends, see appendix 3.)

4. Identifying the sounds in words

One of the main skills needed for writing is the ability to hear the sounds in words. This skill of identifying the sounds is known as phonemic awareness. In this method, children are taught to listen carefully for the sounds in words. The teacher begins with simple three-letter words such as dog or cat. He/she says the words and tap out the sounds. For instance, three taps means three sounds. Care is taken with diagraphs. A dot is placed under each sound in a word to help children distinguish between the sounds rather than letters. The number of dots equals the number of sounds. The word shelf, for example, has five letters but only four sounds, *sh-e-l.* Children may also be asked to listen to the sounds in a word and hold up a finger for each of them. The other way by which the teacher demonstrates the writing skill for children is by saying a word such as goat and asking children to call out the sounds. As the children say each letter sound, he/she writes it on the board. This indicates the significance of encoding for writing and decoding for reading to children. Rhyming games, letter boards and flash cards can be used for doing further practices and activities to improve spelling abilities. Some of the games are:

a) Add a sound: what do I get if I add a*m* to the beginning of *ice*? mice
b) Take away a sound: what do I get if I take away *p* from *pant*? Ant

The letter board is made of a large piece of card with three smaller strips for placing the cards. The upper row is for the vowels and lower row for the consonants. The teacher can ask a child to make a word by placing the letter cards in the middle strip. The child should listen for the sounds in the word said by the teacher, e.g. *pig*, pick out the correct letter cards and put them in order.

In addition, dictation is encouraged from the very beginning in a systematic and organized way. The dictation starts very early from writing the letter sounds and expands to the simple CVC (consonant-vowel-consonant) words. Dictation of consonant blends and diagraphs follow later. Once children are familiar with some tricky words and their spellings, sentences will be dictated.

5. Tricky words

Tricky words are either irregular words, such as to, she, said and, one or are frequently used words that cannot be read or written by blending and segmenting skills. Rather, they need to be learnt by practice, repetition and further exposure.

When teaching the tricky words, the teacher asks students to look at the words and underline the tricky parts. This will help children to analyse the words from the very early stages and store the detailed information and correct spellings of the words in their memory.

The different ways for learning and teaching the tricky words are:

1. Look, copy, cover, write and check

The children are asked to first look at the word and identify the tricky part(s). e.g. the word *chair* has a */e/* sound, but it is spelt with an */ai/*. Then, they say the letter names (not the letter sounds) several times. The reason for this is that these words do not sound out reliably. After that, the children copy the words in their Pupil Book by tracing the dotted letters. Then, they cover up the dotted word in their book and write it in the next column, looking back to check if it is correct.

2. Word wall

In Jolly Phonics, the tricky words are divided into six color-coded groups of twelve tricky words each. The coloured groups are compatible with the colours used for the tricky word flowers in the Pupil Books. The flowers can also be pinned to the wall to build up a wall display for enhancing children's visual exposure once the tricky words contained in them have been taught.

3. Say it as it sounds

Say the word so that each sound is heard. For example, the word *is* said as *wass*, to rhyme with *mass*.

4. Word families and patterns

When a tricky word is taught, the teacher shows other words with the same spelling pattern. For instance, the word *bike* can be linked to *like*, *trike*, *hike*, and other similar words which end in *'ike'*. Each word family can also be likened to a wider group, in this case, words with '*magic e*' i.e. 'i-e' words like pipe, pine, line, hive, etc.

5. Does it look right?

When children are uncertain about how to spell a word, the teacher can ask them to try different ways of writing it on a scrap paper and then choose the one which mostly looks right. This is specifically helpful for vowels which have alternative spellings. E.g. children can try *berd*, *burd* and *bird* for the word *'bird'*.

6. Mnemonics

The initial letter of each word in a saying gives the correct spelling of a word. E.g. *laugh*: Laugh At Ugly Goat's Hair.

2.6.1. Empirical Research Studies on the Efficacy of Jolly Phonics Programme

Sumbler and Willows (1996) ran a trial on Jolly Phonics with 281 kindergarten children from eight suburban Toronto primary schools. One hundred and fifty one students were assigned into ten experimental (Jolly Phonics) groups and 131 pupils were assigned to ten control groups. The experimental and control groups respectively had 31% and 18% ESL participants. The post-test results near the end of senior kindergarten showed the Jolly Phonics pupils with a very substantial advantage on every measure. On the WRAT-3 reading test, their average score was 107.5, compared to 101.3 for the controls. The advantage on the WRAT-3 Spelling test was 104.8 to 98.1. The data were also analysed to determine what happened to pupils who were adjudged "at-risk" from low pre-test scores in letter-naming. Post-test scores showed that between 1/4 and 2/3 (depending upon the measure) of the Jolly Phonics at-risk pupils were performing at acceptable levels; by contrast, "...the distribution of control at-risk children changed little".

In another study, Morgan and Willows (1996) looked at the effects of Jolly Phonics on phonemic skills of 225 children in 6 primary schools in low-income areas within a high range of ESL students (mainly Punjabi). This technical study found that pupils in the ESL experimental group performed at least as well (and often much better) than the English-speaking controls on every measure except the auditory discrimination of phonemes. Since phonemes vary considerably from one language to another, this last result was not surprising.

Kwan and Willows (1998) explored the impact of early phonics instruction on children learning English as a second language. This study of ESL pupils found that "...truly remarkable achievements were made on measures of phonological processing by the [Jolly Phonics] children who received training in both junior and senior kindergarten." It argues against the accepted Canadian practice of avoiding the ESL problem by fostering cognitive growth through instruction in the pupil's native language.

Stornelli and Willows (1998) ran a study similar to that of Morgan and Willows (1996) with a minor difference in methodology. They included an experimental group which received the Jolly Phonics intervention in junior kindergarten as well as senior kindergarten. Its aim was to determine whether very young children (equivalent to reception pupils in Britain) could benefit from this training. When tested at the end of senior kindergarten, the performance of these pupil on reading, spelling, and phonemic tests was markedly superior to both

the controls and to the pupils who only received Jolly Phonics instruction in senior kindergarten.

Grant (1998) introduced Jolly Phonics to St. Michael's primary school in South Gloucestershire. Of the 66 students who started the school then, 61 were scored at or above their age on the Single Word Reading Test after one semester. On the average, the pupils were 6 and a half month ahead in reading 6 months ahead in spelling. The 90 students who started Jolly Phonics in September 1997 were tested in July 1998. The results turned out to be outstanding. Only 3 children were below their age level in reading. On average, students were one year ahead in reading and one year 5 months ahead in spelling. Special Needs teacher Trudy Wainwright states that "This 'Phonics First' approach has dramatically raised our standards for reading and writing. We are using a synthetic phonics approach so that children are taught decoding and encoding skills before they encounter text".

Stuart (1999) conducted a study with 112 five-year-old children, 96 of whom were English second language learners. The participants were enrolled into either the experimental programme (Jolly Phonics intervention) or the control programme which took a whole-language approach based on Holdaway's (1979) use of big books. Children were pretested on measures of spoken and written language, phonological awareness and alphabet knowledge, prior to a 12-week intervention using either the experimental or control programme. They were post-tested on all measures immediately after intervention, and again one year later. The results confirmed the existing data on Jolly Phonics. The experimental programme accelerated children's acquisition of phoneme awareness and of phonics knowledge, and their ability to apply these in reading and writing. In the year following intervention both groups made comparable progress in most areas; however, at the end of this year the experimental group were still significantly ahead in phoneme awareness and phonics knowledge, and on standardized and experimental tests of reading and spelling.

Johnston and Watson (2005) conducted a longitudinal research study on the effects of synthetic phonics instruction on reading and spelling attainment of primary school children over 7 years in Clackmannanshire, Scotland. Around 300 children in primary 1 were divided into 3 groups. One group was taught through the synthetic phonics (Jolly Phonics programme), one by the analytic phonics method, and one by an analytic phonics programme plus rhyme and phonemic awareness training. In order to make sure that the gains in children's literacy attainment were maintained, the progress of all these children was followed, assessing their performance in word reading, spelling and reading comprehension from primary 1 to primary 7. It was found that at the end of primary 7, the JP group was 3 years 6 months ahead of their chronological age in word reading, 1 year 8 months ahead in spelling and 3.5 months ahead in reading comprehension.

Furthermore, it was discovered that although in an international study, boys had significantly lower levels of reading comprehension than girls in all 35

countries surveyed (including Scotland), the boys in this study comprehended text as well as girls. In primary 2, boys and girls were found to read words equally well, and there were also no sex differences in spelling ability and reading comprehension. However, in Primary 3 the boys pulled ahead of the girls in word reading and by Primary 7 were reading 11 months ahead of the girls. The boys also spelt better than the girls in Primaries 4, 6 and 7, and by Primary 7 were 8.6 months ahead. The boys were also 3 months ahead of the girls in reading comprehension in Primary 7, but this was not statistically significant.

Regarding the gender differences in literacy learning, Johnston, McGeown and Watson (2011) in a similar study made a comparison between 10-year-old boys and girls who had been taught through analytic or synthetic phonics in their early literacy programmes. The boys who received the synthetic phonics method had better word reading than the girls, and their spelling and reading comprehension was as good. Whereas with the analytic phonics instruction, the boys did as well as the girls in word reading, but had inferior spelling and reading comprehension. Overall, it was concluded from these two studies that the synthetic JP approach as part of the reading curriculum was more effective than the analytic phonics approach, even when it was supplemented with phonemic awareness training.

Tooley and Hunt (2005) carried out a research study in 22 schools in low-income areas of Hyderabad, India. Over 500 students took part in the experiment which lasted for 6 months. Approximately half of the children received lessons organized around the Jolly Phonics Programme for one hour every school day in 14 of the 22 schools and the remainder proceeded with their usual methods of teaching English literacy. The findings demonstrated that the improvements in the test scores of pupils experiencing the JP method were statistically higher than those in the control group when assessing reading, spelling, dictation, and the ability to sound out letters and words for 5 of the 6 tests given.

Ekpo, Udosen, Afangideh, Ekukinam and Ikorok (2007) sought to find out the relative effects of Jolly Phonics as a ‘fast track strategy’ in enhancing primary one students’ reading skills. A pretest-posttest experimental design was adopted for this study. The sample consisted of 168 primary one pupils from 5 schools purposively selected from the 3 senatorial district of Akwa Ibom State in Nigeria. Two intact classes in school were selected from to form the experimental and control with Jolly Phonics as the treatment for the experimental groups. The experimental group gained from 3-29 months reading age (5.3 to 5.7) in the Burt Reading Test. Accordingly, the results revealed that JP was effective in enhancing children’s reading skills.

In 2011, Dixon, Schhagen and Seedhouse studied the impact of Jolly Phonics intervention on children’s English literacy skills in low-income schools in India. This study used a quasi-experimental design in which over 500 students in 20 schools participated in the 6-month programme. While the control group continued with their normal English lessons, the experimental group which

consisted of over half of the participants experienced lessons organized around the JP materials. The findings showed that there were statistically significant differences between the intervention and control groups in the improvements of children in their test scores in reading and spelling.

Eshiet (2012) inquired into the possible effects of Jolly phonics on improving the reading skills of Nigerian children. She adopted Jolly phonics as the intervention in a case study design. The mixed method approach involved collecting quantitative data through standardized reading and spelling tests while the focus group discussion of teachers provided qualitative data. The findings demonstrated that the JP method let to the improving of pupils' reading achievement and an increase in teachers' interest in teaching English.

Shepherd (2013) investigated the effect of Jolly Phonics programme on increasing basic literacy skills of Nigerian primary school students in Cross River State. Almost 300 children, across 6 schools participated in in this 8-month stud. At each school, one class received daily lessons using the JP method and one control class continued with the traditional method which mostly consisted of rote learning and memorization. A pretest/posttest comparison was made using the Early Grade Reading Assessments tools which tested a number of basic literacy skills in English. The results demonstrated that the children in JP groups performed at a much higher level on the assessments than those who received their normal literacy instruction.

2.7. General Developments in Studying Young Learner Affective Characteristics

For quite a long time, research on affective learner factors were mostly carried out on adult learners because it was believed that young learners resemble one another to the extent that inquiry of such individual difference variables would not be fruitful at all. The popular assumption was that all children have high levels of motivation to learn FLs, have very positive attitudes and are successful in learning languages by default. However, MacIntyre, Baker, Clement and Donovan (2002) notify that young learners differ among themselves just the same as more mature learners do. Therefore, investigations into young learners' individual differences are crucial (Mihaljevic Djigunovic, 2012).

Research on attitudes and motivation in FL learning has a long history (e.g., Dornyei, 1990; Gardner & Lambert, 1959, 1972; Nikolov, 2002; Vilke, 1979), however, the inceptions of such investigations with young FL learners were somehow complicated. The existing instruments were mostly appropriate for older learners and could not automatically be used with children. The available options were either to adapt them to the needs and requisites of younger age groups or design completely new ones (Mihaljevic Djigunovic, 2012).

Despite the fact that motivation and attitudes are two distinct individual learner factors, they are closely inter-related and are frequently investigated together. "While language attitudes refer to positive or negative feelings about a language and what the learner may connect it with (Gardner &MacIntyre,1993), Gardner (1985, 2010) defines motivation as a combination of the desire to learn the language, positive attitudes to learning the language, and the effort invested in learning" (Mihaljevic Djigunovic, 2012: 57).

Until recently, motivation and attitudes were regarded in terms of their relationship with learner achievement and considered as the cause of learning success (e.g., Burstall, 1975; Vilke, 1979). However, more recently some researchers (e.g., Blondin et al., 1998; Edelenbos, Johnstone, & Kubanek, 2007) have pointed out that attitudes and motivation should be looked at as an aim and the outcome of early FL learning. Attitudes and motivation are not any more solely thought of as single variables in relation to learning outcomes, but they are often viewed as interacting with other individual learner characteristics, such as language anxiety, language aptitude, language learning styles and strategies, and the like. Furthermore, it is observed that the developmental aspects of motivation and attitudes are taking on importance (e.g., Mihaljević Djigunović & Lopriore, 2011; Nikolov, 2002). This can indicate the dynamics of young learners' affective development, which reveals the complex characteristics of early FL learning (Mihaljevic Djigunovic, 2012).

On the contrary, in the 1970s language learning achievement was defined and evaluated with regard to the number of linguistic structures young learners were able to master within a particular learning period, which led to deciding against early FL learning in some contexts such as Britain. But due to the contributions made in the developments of young learners' affective factors, nowadays young learners are seen as significant sources of data which have multidimensional and dynamic characteristics. However, despite the major progresses in the studies on young learners' motivation and attitudes, a lot remains to be investigated in this area. The most recent developments in motivational research such as L2 motivational self-esteem have been connected with older learners and have not yet concerned younger learners. Therefore, research innovations and reconceptualizations are seen as necessary in this field. Since age is a key factor in FL learning, there seems to be a need for young learner motivation to be conceptualized differently from older learner motivation (Mihaljevic Djigunovic, 2012)

2.8. Eliciting Data on Attitudes and Motivation of Young Language Learners

According to Mihaljevic Djigunovic (2012) investigating young learners' motivation and attitudes is rather complicated. Children sometimes find it difficult to express their thoughts, perceptions and feelings. Therefore, it is of great importance that appropriate instruments and procedures are made use of. "Young

learners have been observed to be a very valuable source of information on early FL learning" (Enever, 2011; Nikolov, 2002). The same as studies with older learners, questionnaires are often used to collect data on young learners' motivation and attitudes. With younger children usually smiley questionnaires are used (Szpotowicz, Mihaljević Djigunović, & Enever, 2009). They are considered as age-appropriate for young learners because they consist of visual scales that children can easily relate to. In smiley questionnaires, children choose a happy, sad or indifferent smiley according to how they feel or think about the language learning aspect in question.

Relatively lots of studies have been carried out on the attitudes and motivation of young learners as opposed to older or adult learners. Most of the research on age-related differences in motivation and attitudes suggest that generally young learners have more positive attitudes compared to older learners. But this interest tends to decline over time (e.g. Burstall, 1975; Chambers, 2000; MacIntyre et al., 2002; Nikolov, 1999). Nevertheless, findings of the Croatian longitudinal project showed that under favorable teaching conditions, high motivation and positive attitudes can be maintained over long periods of time (Mihaljevic´ Djigunovic´, 1998). On the other hand, some studies haven't discovered any significant age-related differences in motivation and attitudes of young leaners of different age groups (Lasagabaster, 2003; Williams et al., 2002). Some other studies (e.g. Julkunen & Borzova, 1996) also found mixed results.

A number of studies have been conducted to investigate the fluctuations in attitudes and motivation of young learners with different starting ages. While Muñoz (2000) and Muñoz and Tragant (2001) found no significant differences in motivation between children starting at ages eight and 11, Cenoz (2004) found that those young learners that had started learning a FL earlier had higher motivation, with larger differences existing between those that started at four years and later starters than between those that started at eight or 11 years. Tragant (2006) indicated a general pattern which implied a decline in positive attitudes around the age of 10–11.

Lopriore and Mihaljevic Djigunovic (2011) conducted a research study on the attitudinal aspects of early EFL learning. Their aim was to recognize the initial attitudes of young beginners of EFL, the developments of those attitudes from grade 1 to grade 2 and the relationship between those attitudes and other aspects of early EFL learning such as language behaviour and learning achievement. A total of 91 Italian and Croatian EFL learners selected from among students with different language learning abilities (high, average and low abilities) participated in the study. The instruments used for measuring attitudes and classroom behaviour included smiley questionnaires and classroom observation and interview. The findings revealed that young learners' initial attitudes towards EFL were mostly positive and with the exception of a few students, these positive attitudes continued to grade 2.

In another study, Lopriore and Mihaljevic Djigunovic (2011) tried to explore the initial feelings, attitudes and motivation of young EFL learners and change in their attitudinal and motivational levels over three years of the primary school. Innovative methods in the form of smiley questionnaires and oral interviews were used to elicit data from children. These data triangulated with the data obtained from teachers, parents and classroom observations indicated that young learners generally start FLL with very positive attitudes and high motivation. The changes that happen in motivational levels are due to the novelty of new activities and difficulties with language learning. The overly positive self-concept of young learners turns more realistic because their awareness and ability to compare themselves with peers increases when they grow up. Moreover, as children grow their individual learner characteristics associate with language achievements more.

Mihaljevic Djigunovic (2012) looked into young FL learners' motivation under two different sets of learning conditions. She intended to see whether young learners' motivation and attitudes for learning English would be significantly different in highly favourable and unfavourable teaching settings. She concluded that young learners who learned English under very favourable conditions (appropriately trained teacher, intensive classes, small groups) viewed English as a favourite school subject more frequently and enjoyed age-appropriate class activities (playing) more compared to learners who were exposed to formal learning under less favourable conditions. Therefore, she claims that good conditions of learning should be secured at the very start of FL learning. The first contact with the FL may be decisive for the young learner's attitudes and motivation for the rest of their life (Mihaljevic Djigunovic, 2012).

2.8.1. Children's Agency

"The field of SLA has been traditionally dominated by studies that explored children's second language performances from an adult perspective, using tests and tasks without involving children more actively in the process of research" (Pinter, 2012: 108). Until recently researchers when investigating children's lives and aspects of childhood have been inclined to ask adult respondents such as teachers and parents to give reports rather than children themselves (Scott, 2000). These inclinations may have been based on the belief that children are not as reliable sources of information as adults are. However, there's been increasing evidence indicating that children themselves are the best sources of information as far as issues pertinent to them are concerned.

Following the declaration of children's rights by the United Nations Convention on the Rights of the Child in article 12(1989) and the British Psychological Society's Ethical Code's shift from 'subjects' to participants in the 1991 edition, a growing awareness has been fostered to give children a more active participation in the research studies which are conducted on them and in decisions which affect them (Pinter, 2012; Woodhead & Faulkner, 2000).

Davie (1993) in his paper 'Listen to the child: a time for change', argued that children's perspectives should be taken into consideration in areas of psychological work especially the projects concerned with issues that affect children's lives. Davie's claim was also directed at academic researchers to refine their methods of data elicitation from children in order to empathize with children's experience, understand their beliefs and respect their concerns (Woodhead and Faulkner, 2000). Pinter (2012) as well mentioned that traditional questionnaires and interviews to investigate children's opinions and views are not usually very well suited to their needs. These assumptions have resulted in the development of innovative methods such as 'participatory' (e.g. Nagy, 2009 and O'Kane, 2000) and 'visual' methods (e.g. Johnson, 2008) which can be used to elicit insights from children of all ages and compensate for young learners' restricted linguistic abilities to express themselves.

2.9. Literacy Motivation

Literacy motivation is a multifaceted and complex entity. As the experts in the field argue, motivation cannot be reduced to a single factor which people have or do not have. The conceptual framework of literacy motivation is founded on renowned motivation constructs of current motivation theories. Some of these constructs are concerned with individual's beliefs, values, and goals for achievement and some others are related to the intrinsic and extrinsic motivation and social motivation. These elements are pivotal to literacy motivation (Guthrie& Wigfield, 1997; Wigfield, 2000). Thus, literacy motivation must be perceived with regard to goals or reasons for reading or writing which may be associated with different aspects such as task values, expectancies, self-efficacy, or goal orientation (Eccles & Wigfield, 2002; Guthrie et al., 2007; Mazzoni, Gambrell, & Korkeamaki, 1999). People may have different reasons, goals, and expectancies and subsequently be motivated in various ways. This multifaceted structure is clearly perceptible from authors in the field of literacy considering reading and writing motivation as multidimensional elements (Baker & Wigfield, 1999; Guthrie et al., 2009; Hornery, Craven, Yueng & Ali, 2008; Pajares & Valiante, 2001;Pitcher et al., 2007; Schutte & Malouff, 2007) and constructing instruments to identify reading and writing motivation with several dimensions, allowing a multifaceted view of these constructs (Coddington & Guthrie,2009; Codling & Gambrell, 1997; Garcia & Caso, 2004; Hornery et al.,2008; Pajares & Valiante; Scher & Baker, 1997; Wigfield, Guthrie, & McGough,1996).

2.9.1. Gender Differences in Literacy Motivation

Gender is a variable that has the potential to affect motivation profiles. Various studies have investigated the effects of gender differences on motivation which have reached a degree of similitude with girls gaining higher motivational scores.

Baker and Wigfield (1999) found out a gender effect in fifth- and sixth-grade students for nine different reading motivation dimensions, with girls displaying

higher motivational scores than boys. Wigfield and Guthrie (1997) identified a similar effect in fourth and fifth grade students with girls achieving higher motivation with regard to reading efficacy, importance of reading, and social reasons for reading and boys only being more motivated in terms of competition in reading. Monteiro and Mata (2001) obtained the same results with boys gaining higher motivation only in reading competition. Mazzoni et al. (1999) also came up with girls showing higher reading motivational scores in first and second grades.

The same gender effect has been observed in reading attitudes too. McKenna (2001) came up with some results in terms of reading attitudes which suggested that girls possessed more positive attitudes than boys. The author held that the reason for this gender difference may be the gender-specific beliefs about what others expect from reading. He furthermore explained that although it is not clear yet that how these cultural expectations operate, research in different cultural settings has not demonstrated any cultural specific expectations. Analogous gender effects were also discovered with regard to motivation for writing which as well were in favour of girls achieving higher motivation in most aspects of writing (e.g. Meece & Miller, 1999; Pajares, Miller, & Johnson, 1999; and Pajares & Valiante, 1997).

2.10. The Significance of Reading Motivation

Being able to read is not only important for academic success, but also as a general life skill that is necessary in a literate society (McGeown, 2013). Within the young learners' reading research field, the focus has been mostly on the development of cognitive (e.g., language, decoding) skills to sustain and ameliorate children's reading rather than a focus on increasing motivation to read. However, researchers are increasingly becoming aware of the fact that children's motivation to read is decisive for their reading development. According to McGeown (2013), children need both the skill and will in order to become successful readers. Since reading is a purposeful and effortful activity which often involves preference and perseverance, motivation is vital for children to develop their reading skills. Students' motivation in reading at a young age may have significant influence on later learning outcomes.

Many studies have investigated different aspects of young learners' reading motivation. For instance, Wigfield (1997), Baker and Wigfield (1999), Wigfield, Guthrie, Tonks and Perencevich (2004), and Hornery et al. (2008) studied the domain-specific and multidimensional characteristics of reading motivation. Others inquired into the relationship between children's attitudes and motivation for reading and their achievement and success in reading (e.g. Atkinson, 2006; Gambrell, Palmer, Codling & Mazzoni, 1996; Guthrie & Knowles, 2001; Mckenna, 2001; Mckenna &Kear, 1990; Mckenna, Kear & Ellsworth, 1995; Morgan & Fuchs, 2007; Unrau & Schlackman, 2006; Verhoven & Snow, 2001; Wang & Guthrie, 2004; and Wigfield & Guthrie, 1997). In addition, some others have studied the association of motivation with the achievements in both reading

and writing (e.g. Gambrell & Gillis, 2007; Mata, 2011; Nolen, 2007; and Wilson & Trainin, 2007). However, among all the research studies in the field of literacy motivation, research on the effect of phonics (especially synthetic multisensory phonics) as a way of teaching literacy on enhancing young learners' motivation for literacy has been very scant, if any at all. Furthermore, most of the research in the area of reading and literacy motivation has been conducted in the context of English as the mother tongue of the learners rather than ESL or EFL context. In the present study, attempt has been made to observe the effect of using a synthetic multisensory phonics approach (i.e. Jolly Phonics) in teaching early literacy skills on EFL children's reading motivation, and this is where the present study departs from the studies conducted in the literature.

As it was mentioned earlier, the instruments and questionnaires intended to elicit data from children should make sense to them in order to make them engaged in the research process and gain reliable data. To provide some examples of the research which used this kind of visual child-friendly method for eliciting data on young learners' motivation and attitudes the studies by Mckenna & Kear (1990) and Mihaljević Djigunović (2008) can be mentioned. Mckenna & Kear (1990) made use of Garfield (the cartoon character) as the choices of their 4-point scale questionnaire. They used this reader-friendly attention-getting questionnaire to collect data on elementary students' attitudes toward recreational and academic reading. Each questionnaire item contained 4 choices from the happiest to the saddest Garfield and the participants had to choose one of the Garfields based on their feeling about that item, questioning their attitude toward one of the aspects of reading. Mihaljević Djigunović (2008) also used a 3-point smiley questionnaire containing happy, sad and indifferent smileys to obtain data on EFL young learners' attitudinal aspects of early foreign language learning.

In the present study, the researcher, inspired by the work done in the previous literature, has designed and developed a child-friendly questionnaire by using Sponge Bob (an attractive cartoon character) as the choices of its items in order to find out whether using synthetic multisensory phonics (Jolly Phonics) for teaching early literacy skills has any effect on enhancing young learners' early reading motivation. The study also seeks to find out whether this synthetic multisensory phonics approach affects girls' and boys' motivation differently, i.e. to see whether there is any gender difference in the evaluations of the motivation questionnaire made by girls and boys.

2.11. Summary

In this chapter the researcher provided the background of the study. First, a general description of literacy and its related issues such as the basic requirements for learning literacy skills as well as the differences between L1 literacy acquisition and L2 and foreign language learning were discussed. Furthermore, the debate over whole language and phonics approaches to teaching literacy and different methods of phonics instruction were taken into consideration. As it was

elaborately explained in section 2.5.2, the existence of opposing results about the efficacy of synthetic phonics for teaching English literacy skills reveal the pressing need for further research. Moreover, most of the research in the literature has been carried out in native English-speaking and L2 contexts. Besides, the benefits of multisensory approaches to phonics have mostly been investigated with the deaf or hearing-impaired children and the students with special needs, and mainly in L1 contexts. The present study is presumed to fill the lacuna in this regard by adopting the Jolly Phonics method which uses a combination of synthetic and multisensory approach to phonics instruction. Consequently, it is expected that the JP programme will turn out to yield promising results in the Iranian EFL context as well.

Finally, with regard to the particular significance of motivation for learning in early stages and the paucity of research in this area, the researcher hopes to fill this gap by inquiring into the possible effects of synthetic multisensory phonics (i.e. Jolly Phonics) on young EFL learners' early motivation for learning to read in English.

Chapter Three

Methodology

3.1. Overview

In this chapter, the methodology of the research will be described. First, a brief explanation of the design of the study (see 3.2.), the research questions and the research hypothesis will be presented (see 3.3.). Next, a detailed description of the research method which contains precise information about the participants, classroom materials, teachers' training course and treatment will be provided (see 3.4.). Further, section 3.5 elaborates on the instruments used in the study that consists of the administration and scoring procedures, reliability and validity of the tests and the questionnaire, and pilot study and experts' judgment. In addition to that, the process of data analysis will be discussed (see 3.6.). Finally, a summary of the chapter is given in the last section (3.7.).

3.2. Design of the Study

This study is a *quasi-experimental* one which involves comparisons between the performances of two groups of young EFL learners exposed to two different types of phonics instruction. The independent variables of the study are the types of phonics instruction (i.e. traditional phonics instruction and Jolly Phonics), and the dependent variables of the study are the learners' scores on a reading test and a spelling test and the students' answers to a four-point Likert scale questionnaire(See 3.6). In addition, gender has the role of moderator variable in this study.

3.3. Research Questions and Hypotheses

Although the research questions and their related hypothesis were provided in chapter 1 (see 1.4), they are presented here again for the ease of reading:

1. Does the synthetic multisensory approach to phonics (i.e. Jolly phonics instruction) in comparison with traditional approach have any significant effect on Iranian young EFL learners' reading skills?

2. Does the synthetic multisensory approach to phonics (i.e. Jolly phonics instruction) in comparison with traditional approach have any significant effect on Iranian young EFL learners' spelling skills?

3. Does the synthetic multisensory approach to phonics (i.e. Jolly phonics method) compared to traditional phonics instruction have any significant effect on Iranian young EFL learners' reading motivation?

4. Is there a significant difference between the performances of girls and boys in the experimental group (i.e. the group to whom literacy was taught through Jolly Phonics) on the reading test?

5. Is there a significant difference between the performances of girls and boys in the experimental group (i.e. the group to whom literacy was taught through Jolly Phonics) on the spelling test?

6. Is there a significant difference between the evaluations made in the Early Reading Motivation Questionnaire by girls and boys in the experimental group (i.e. the group to whom literacy was taught via Jolly Phonics)?

Consequently, based on the aforementioned research questions the following null hypotheses were formulated:

H1: The synthetic multisensory approach (Jolly Phonics method) adopted for teaching early literacy does not have any significant effect on the reading skills of Iranian EFL children.

H2: The synthetic multisensory approach (Jolly Phonics method) adopted for teaching English literacy does not have any significant effect on the spelling skills of Iranian EFL children.

H3: The Jolly Phonics instruction adopted for teaching early literacy to children cannot significantly enhance young learners' reading motivation.

H4: There isn't any significant difference between the performances of the girls and the boys in the experimental group (i.e. the group who received Jolly Phonics as the treatment) on the reading test.

H5: There isn't any significant difference between the performances of the girls and the boys in the experimental group (i.e. the group who received Jolly Phonics as the treatment) on the spelling test.

H6: There isn't any significant difference between the evaluations made in the Early Reading Motivation Questionnaire by girls and boys in the experimental group (i.e. the group to whom literacy was taught through Jolly Phonics).

3.4. Method

3.4.1. Participants

One hundred participants (50 girls and 50 boys) ranging from 10-12 years old were selected through non-random convenience *sampling* from among the EFL elementary learners in Sokhansara Institute. The reason for selecting these students was that they were going to learn English for the first time. Therefore, the utilization of each of the two phonics instruction methods could be observed in teaching literacy to them.

In order to make sure that the students were homogeneous in terms of their oral language and alphabet knowledge in English (i.e. to become sure that all of them were zero beginners of English), the ones that had any familiarity with the alphabets or had studied English before in any other institute or had been home schooled in English were recognized prior to the treatment and removed from the study.

3.4.2. Procedures

In terms of the number of sessions, the available time, the course book, the syllabus and the scope and sequence of teaching the course, everything was already determined by the institute. Therefore a careful and scrupulous planning was needed to make everything in line with the institute's rules. Consequently, the permission of the head of the institute was obtained for implementing the project. In addition to that, parents of the students were informed about the project as well as the tests and the questionnaires which were supposed to be administered to their children at the end of the course and their consent was gained. It is worth mentioning that head of the institute was made aware of every stage of this research. He participated in the teachers' training course in order to get familiar with the Jolly Phonics programme and what we were intending to do in the classes. Therefore, his consent was gained to use a mixed syllabus in which half of each session was devoted to teaching literacy through Jolly Phonics programme and the other half was allocated to teaching English as a second language through the students' course book (Hip Hip Hooray Starter).

On April 28th 2014, Christopher Jolly, the managing director and publisher of Jolly Learning Ltd sent all the classroom materials needed for running the treatment. These materials included:

1. Jolly Phonics Starter Kit Extended which contains: Tricky Word Wall Flowers, Finger Phonics Big Books, Alternative Spelling & Alphabet Posters, Jolly Phonics Wall Frieze, Letter Sound Strips, Jolly Phonics Word Book, Jolly Phonics DVD, Jolly Phonics Cards (4boxes), Jolly Phonics Readers (level 1 & 2), Jolly Songs (book & CD), The Phonics Handbook.
2. Jolly Phonics Kit Extra which contains: Talking Pen, Letter Sounds Book, Jolly Phonics Extra Flash Cards, Jolly Phonics Pupil Books 1,2 & 3, Jolly Phonics Extra Teacher's Book, Jolly Phonics Extra Readers: Red Level (18 books), Yellow Level (18 books), Green Level (18 books).
3. 50 black & white Jolly Phonics Pupil Books1 for students of the experimental group of the study.

It takes at least about a school year (about 9 months) for the Jolly Phonics programme to reveal its beneficial effects on literacy skills of students (S. Darby, personal communication, May 2, 2014). But due to the time limitations and other restrictions we had, and since this research was not a longitudinal study, we used only some of the above-mentioned materials which were suitable for a 30-session treatment. The materials used in the treatment phase of the study are presented below in detail. Except the course book (Hip Hip Hooray Starter) which was the same for both the control and experimental groups, the rest of the materials described here were the JP materials that were specifically used in the experimental classes.

3.4.3. Classroom Materials

3.4.3.1. The Course Book

The English textbook, Hip Hip Hooray Starter written by Eisele and Hanlon (2003) was used as the foreign language course book of the students who participated in this study. Hip Hip Hooray Starter is an introductory level to the Hip Hip Hooray series for children starting to learn English. This book contains 9 unites. In each unit, two or three of the English alphabets along with some simple language structures are presented. Three main words plus 2-6 extra words are introduced per letter which are illustrated by colourful scenes. The short simple speech balloon dialogues introduce the students to print from the early stages of learning English. Furthermore easy interactions are promoted through role-plays and communicative games. The joyful songs and chants in the CD also motivate children and arouse their interest for learning English. Talk time sections teach simple language structures such as short greetings and introduction questions and answers. Also review pages reinforce vocabulary. The activity book with

approximately equal sections based on the student book gives the students enough chance to practice the alphabet and new vocabularies.

It is worth mentioning that all the classes in the institute were equipped with a laptop and an LCD TV. The multimedia softwares and programmes specifically designed by Sokhansara Institute provided the letter-sounds along with the related words in the form of musical/chantlike slideshows that appeared on the TV screen which very well supported children's visual learning and contributed to increasing their engagement in learning.

3.4.3.2. Finger Phonics Big Books

The seven set of Finger Phonics Big Books by Sue Lloyd, Sara Wernham and Christopher Jolly (1993) were used for introducing the letter sounds to children.

> The Finger Phonics Big books present the 42 main letter sounds in English through stories, actions and pictures. The amusing and detailed pictures illustrate the stories, as well as captivating the children's imagination. The books provide plenty of opportunities to teach early literacy skills for language, reading and writing. (Lloyd and Wernham, 1993)

These books include an action for each sound and letters with arrows to show their correct formation and example words that start with each sound. There are also some attractively illustrated exercises at the end of each book that can be used with the whole class and therefor leading to both reading and spelling by learning the letter sounds.

3.4.3.3. Jolly Phonics Pupil book 1

The Jolly Phonics Pupil Book 1 by Sue Lloyd and Sara Wernham (2009) was used to introduce the letter sounds in the order of Jolly Phonics method. In this book, Children are taught how to use their letter-sound knowledge for reading and spelling. Also, the correct way of forming the alphabets are shown.

3.4.3.4. Jolly Songs

The Jolly songs book and CD were used to offer children a fun and interactive way of learning the 42 letter sounds of English. Each letter sound in this book has its short song which is sung to a well-known tune on the CD and an action.

3.4.3.5. Alternative Spelling and Alphabet Posters

The Alternative Spelling and Alphabet Posters were slicked to the classroom walls for increasing the students' visual exposure to the alphabet and alternative spellings of vowel sounds. The alternative spelling poster shows the alternative spellings for many of the vowel sounds along with sample words and illustrations.

The alphabet poster shows each letter with arrows to indicate its correct formation. The letters are arranged in four colour groups which correspond to separate quarters of a dictionary, to help when looking up words.

3.4.3.6. Jolly Phonics Wall Frieze

This frieze which has 7 sections was put up on the class's walls as a means of both enhancing the children's visual exposure to all the letter sounds and also playing games as further practice.

3.4.3.7. Tricky Word Wall Clouds

Tricky words are the words which have irregular spellings. Each of these clouds contained one of the tricky words of the students' textbook "Hip Hip Hooray Starter". The clouds were stuck on a large cardboard on the classroom wall. In addition to making an attractive wall display, they were used to teach and reinforce the reading and spelling of the tricky words.

3.4.3.8. Letter Sounds Book and Talking Pen

The charmingly-illustrated Letter Sounds Book compatible with the Talking pen amazingly fascinated and motivated children for learning the letter sounds and improving their blending and reading skills. An entire double-page spread in this book is devoted to each of the letter sounds. On the right-hand side of each spread is an interactive panel. By using the Talking Pen to touch the various icons on the panel, children can engage with the letter sounds in several ways. For example, they can listen out for the story or song relevant to each sound or hear how the words written in the interactive panel are blended and read.

3.4.3.9. Jolly Phonics Letter Sound Flash Cards

In the Jolly Phonics Letter Sound Flash Cards, there is a card for every letter sound used in English, not just the alphabet letters. They also contain cards for each of the main alternative spellings of the vowel sounds. These cards were used to reinforce children's phonics and blending knowledge in the form of playing whole class or group games with cards.

3.4.3.10. Jolly Phonics Regular Word Blending Cards and Jolly Phonics Alternative Word Blending Cards

Jolly Phonics Regular Word Blending Cards and Alternative Word Blending Cards respectively contain examples of words made from the seven groups of letter sounds used in Jolly phonics and words made using the alternative spellings of the vowel sounds used in English. Dots placed under each sound help children to blend the sounds into words. These cards were used as extra materials for

playing group and whole-class games which further engaged children with blending and reading activities and reinforced their phonics knowledge.

3.4.3.11. Jolly Phonics Word Book

The Jolly Phonics Word Book provides groups of words (according to Jolly Phonics groups) which are suitable for teaching children to read and write. Sample words for blending and reading practices in the class were selected from this book.

3.4.4. Teachers' Training Course

On May 2nd 2014, Christopher Jolly, the managing director and publisher of Jolly Learning Ltd sent a teacher trainer, Susan Darby, to Isfahan. The training workshop was held in Sokhansara Institute where Susan Darby trained the researcher and five other teachers on the Jolly Phonics programme. She taught the researcher as well as the other teachers involved in the study as to teach the letter sounds through jolly songs, by telling the stories and doing the actions for every letter sound. She also introduced the various teaching materials of the Jolly Phonics such as the Letter Sounds Book, Jolly Songs book, Letter Sounds and Alternative Spellings Posters, Tricky Word Wall Flowers, Flash Cards, etc. Furthermore, she trained us on the four other basic skills covered in the Jolly Phonics programme: learning letter formation (cursive hand-writing), blending, identifying the sounds in words and the tricky words.

At the end of the course, Susan Darby gave a certificate of participation in Jolly Phonics training workshop to the researcher and one of the other trainees whose demo appeared to be satisfactory (See Appendix 4 for the certificates of participation in Jolly Phonics training workshop). In addition to that, after observing the video clips of the experimental classes, Christopher Jolly (the managing director of Jolly Learning Ltd) granted a JP professional trainer certificate to the researcher on September 24th 2014 (see appendix 5) and included her as a trainer on their website: www.jollylearning.co.uk. (See appendix 6).

3.4.5. Treatment

Here, it should be made clear that Jolly Phonics is a programme which is only aimed at teaching literacy skills (reading and writing), not English as a second language. Hence, other language skills and sub skills should be taught via textbooks which are planned for teaching English as a second or foreign language.

This quasi-experimental study was conducted during an English summer course and lasted for four weeks (30 sessions). The learners were assigned to eight Starter classes (four girls' classes and four boys' classes) according to their age and their elementary education levels (zero beginners) by the institute. Two of the

girls' classes were selected as the control group and the other two were chosen as the experimental group. Similarly, two of the boys' classes were considered to be the control group and the other two were opted for the experimental group. Each class had an average number of 15 students. As a result, we had four control groups i.e. about 50 students (approximately 25 girls and 25 boys) and four experimental groups i.e. about 50 students (approximately 25 girls and 25 boys). The students in the control groups proceeded with their ordinary lessons which were organized around the rote traditional phonics. Their teachers started by teaching the letters of alphabet and their associated sounds followed by teaching some example words that started with those specific alphabet letters (e.g. *apple* is introduced as an example word for the letter sound *a*). This procedure was usually done through repeated drills in which the teacher chanted the words and students repeated after the teacher in unison. However, the teachers who were selected for teaching the experimental classes had to be chosen from among those who had been trained in the Jolly Phonics workshop. Subsequently, after informing the head of the institute, the responsibility of teaching the girls' experimental classes was entrusted to the researcher and teaching the boys' experimental classes was assigned to another teacher who had been trained in the Jolly Phonics training course. In addition, in order to gain coordination between these two teachers, two sessions were held prior to the course discussing the procedures and sequence of teaching the materials for accomplishing the aims of this research project.

The students would attend the English classes 6 days a week. The treatment was carried out in thirty 90-minute sessions. 45 minutes of each session was devoted to teaching literacy skills through the Jolly Phonics programme and the other 45 minutes was allotted to teaching other language skills and sub skills i.e. the simple dialogues, songs, structures and vocabulary items in the children's textbook. One session of the treatment in the experimental groups can be reported as following: First, one of the letter sounds was introduced in the following way; for example for teaching the letter sound'*s*', the teacher would clip the big finger phonics book 1 on the board and ask a volunteer to look at the pictures and tell the relevant story in Farsi. Most of the times, kids took good guesses at telling the stories, actions and the sounds of the alphabets and letter sounds. However, the teacher told the story (e.g. Sam and the snake, see page 22 in Jolly Phonics teachers' book) again as well as the related action (weaving her arms like a snake while making *sssss* sound). Children would also do it along with her. They all sang the*'s'* song and did the action together (The snake is in the grass…, see page1 in the Jolly songs book). After that, the teacher taught how the letter*'s'* is formed. She asked some volunteers to come over to the board and trace the big dotted letter with their finger on the big finger phonics book. Other students would also accompany the volunteers by showing the letter formation in the air. As further practice, she worked the formation of letters with her students via a software (My First Handwriting) which automatically showed the formation of letters when each letter was clicked on. Then, she taught blending by sounding out the words starting with*'s'* in their pupil book. She put a dot under each letter sound in the words to aid the children with blending especially in the primary

stages. In addition, she encouraged the students to look for the words starting with *'s'* in the letter-sounds book by touching those items with the talking pen to hear the words. This way they learnt the words starting with *'s'* well so that they were able to do the exercises in their pupil book such as crossing out the pictures of the words that did not start with '*s*'(see page 2 in Pupil Book1).

The Letter Sounds Flash Cards were also used to play games which helped the reinforcement of learning the letter sounds and created a fun atmosphere in the classroom. Children really enjoyed playing games with the flashcards. For example, the teacher would tell the kids to sit in a circle. She spread the cards among them and played a song for them. She asked each child to give his/her card to the kid sitting next to him/her very quickly while the song was being played. Therefore, children started giving the cards to each other while the song was being played. As soon as she paused the song, each student showed the card in her/his hand and told its sound. If he/she said the correct sound, he/she would win and could continue playing the game, but if he/she said a wrong sound for that card, he/she would lose the game. In case of younger children or weaker students, in order not to make them disappointed or demotivated when they made mistakes, the teacher would tell them: If you receive a card in the second round and say the correct sound for that, you can continue playing the game.

The entire 42 letter sounds of English were introduced by doing the steps and procedures explained above. A point that has to be mentioned here is that as it was stated earlier since the Jolly Phonics programme had to be implemented in line with the students' course book (Hip Hip Hooray Starter), three of the 42 letter sounds presented in Jolly Phonics (ie, ue, oi) were eliminated from the syllabus. The reason for doing this was that these three letter sounds were not included in any of the vocabulary items in the students' course book. Instead, three other alternative sounds for which there were sample words in the students' text book were taught. These alternative letter sounds were *'ea'* (the alternative to *'ee'*), a-e (one of the alternatives to *'ai'*) and *'ow'* (one of the alternatives to *'oa'*). Consequently, those letter sounds which were omitted from the syllabus were also not embodied in the reading and spelling tests. Rather the aforementioned alternatives were comprised in the tests. Every session, three or four of the letter sounds were taught to children with the sequence and procedures described above.

Right after teaching each letter sound, the teacher would introduce the related vocabulary items which started with that specific letter in the students' textbook. As it was pointed out earlier in 3.3.1., three main words plus 2-6 extra words are introduced per letter in Hip Hip Hooray student book. Then simple structures and short dialogues in the course book were taught. Afterwards, the teaching of the story and song in that particular unit would follow in order to reinforce the learning of those vocabulary items, structures and dialogues which were taught earlier.

After this phase, almost in the last 30 minutes of the class, the teacher would go back to working on the literacy skills of students through Jolly Phonics again. At this stage, the teacher would focus on teaching and reinforcing the blending (for reading) and segmenting (for writing) skills. She wrote the sounds of a word one by one on the board and asked the students to sound out the letters as she was writing the word on the board. Then, she put a dot under each letter sound and asked the kids to tell her how many sounds that specific word had by looking at the number of the dots. These dots would specifically help the children with distinguishing the digraphs (we would introduce diagraphs as twin sounds to our students) as one sound.

In addition, she asked her students to try reading and sounding out the words in the Letter-Sounds Book and then check themselves by touching the Talking Pen on the words to see whether they had read the words correctly or not.

Besides, in order to give variety to the teaching methods and materials, sometimes the teacher would use flashcards for strengthening the students' blending and segmenting skills. She asked the students to make words by putting the unscrambled letter-sound flash cards in order as a game. Furthermore, they played whole group blending games. The teacher divided the students into two groups and showed the word-blending cards to each person from each group and asked them to read the words. The group which had read more correct words would win the game.

Another game which the teacher would play with the students to improve their blending skills was doing the actions for the sounds of a word without saying the sounds as if doing pantomime. The child who was able to guess what the word was and sounded it out, would be the winner and could come to the front of the class to continue the game. Sometimes, we played this game in groups. For example, a group of 3 children came to the front of the class, each doing the action for one of the sounds in a word (e.g. the word "sit") without saying its sounds and the rest of the class had to guess what that word was.

Moreover, we offered some beneficial points to our students while teaching blending and segmenting. For instance, we told them when two vowels go walking, the first one does the talking. We explained for them that when two vowels appear together in a word, the first one that is cheeky doesn't let the second vowel talk. The second vowel which is shy remains silent and doesn't introduce itself. Only the first vowel says its name.

As for the case of magic *'e'*, which comes at the end of words such as snake or rope, we would tell the children that magic *'e'* remains silent but asks the preceding vowel to introduce itself. For example, in the word snake, *'e'* asks *'a'*: what's your name? and *'a'* answers: I am a (ai). We would also write the magic 'e' and its preceding vowel in a different colour in the words, e.g. sn*a*k*e*, r*o*s*e* in order to make their distinction easier for children.

After working on blending and segmenting skills in the form of various games and fun activities which were described above, the teacher would write some sample words containing the letter sounds which were taught that day on the whiteboard. The sample words were chosen from the students' textbook. The learners were asked to copy those words in their notebooks and practice writing them at home. The teacher would give a dictation test of those words to students the next day; i.e. the first 10 minutes of every session was devoted to a dictation test of the words which were taught in the class and practiced at home in the previous session.

With regard to teaching the tricky words, from the very beginning of introducing the literacy skills to our students, in a very simple way, we explained to them that English words consist of two groups: words with regular spellings which can be learnt by blending and segmenting, and words which have irregular spellings (i.e. tricky words). We provided them with some example words from their mother tongue i.e. Farsi such as the word "خواهر" and clarified for them that the spelling of the tricky words should be memorised by means of repetitions and practice, and that they can't read and write these words by their blending and segmenting skills.

When introducing a tricky word, we asked our kids to first look at it and identify the tricky parts. For example, the word "alligator" in which the second 'a' is sounded as *'ai'* and the *'or'* as *'er'*. This would help the kids to learn how to analyse the words from the early stages. We also made some cards in the shape of clouds, wrote every new tricky word on a cloud card and stuck them to the walls of the classroom. After a couple of days that we had a wall display of at least 6-7 tricky words, we called the students to come over and find the tricky words that we called out on the display and point to them.

Another way that we used for teaching the tricky words was by introducing those words in repetitive sentences which followed a similar structure. This way, the students would learn the tricky words as well as the grammatical structure or the sentences included in their course book. We also told them to write the tricky words of those sentences in a different colour in order to consistently make them conscious of learning the tricky words.

For example:

This *is* an *alligator*.

This *is* a *penguin*.

This *is my mother*.

This *is my father*.

3. 5. Instruments

Since the purpose of the present study was to simply assess learners' phonics knowledge after a particular period of instruction, a *one-shot design* was used. This design is a common design employed in cross-sectional language studies, where the respondents are recruited on a one-off basis.

Therefore, three instruments were utilized to collect the data in this study. Each instrument is discussed in detail below:

1) The word reading test: A 25-item word reading test (See appendix 7) was administered to the participants individually to observe the effect of each method of teaching phonics on students' reading skills. In order to estimate the effect of instruction on improving learners' reading proficiency, all the items in this test were unseen.

2) The spelling test: A 42-item fill in the blank spelling test (See appendix 8) was given to children in order to estimate the effect of each of the two methods of teaching phonics on improving their writing skills. Each item represented one of the 42 letter-sounds of the English language. Unlike the word reading test, all the items in the spelling test were seen. They were all selected from the vocabulary items in the students' course book (Hip Hip Hooray Starter).

3) Early Reading Motivation Questionnaire (ERMQ): A 23-item 4-point Likert scale motivation questionnaire (See appendix 9) was given to students of each group in order to find out which of the phonics instruction methods had led to higher levels of learners' reading motivation.

The questionnaire had 23 items in Farsi. The items were derived from two standardized questionnaires: Young Reader Motivation Questionnaire ("Coddington & Guthrie, 2009") and Reading Motivation (Adapted from Jingle Jangle) ("Hornery et al., 2008 [Based on Jingle Jangle, Marsh et.al., 2003]).

The Young Reader Motivation Questionnaire ("Coddington & Guthrie, 2009") has two forms: a student form with 12 open-ended questions and a teacher form with 15 open-ended questions. All the questions in this questionnaire are related to some aspect of young readers' reading skills. These aspects are efficacy for reading, reading orientation and perceptions of difficulty in reading. The Reading Motivation (Adapted from Jingle Jangle) (Hornery et al., 2008 [Based on Jingle Jangle, Marsh et.al, 2003]) is a 34-item survey which investigates the reading motivation of primary students aged from 5 to 12 years old. Its factor structure is comprised of five factors: mastery, intrinsic, cooperative, individual, and competition.

The items related to the purpose of our study were adopted from these two questionnaires, changes were made in some items in order to adapt them to the objectives we were looking for and at last all the items were translated into the participants' mother tongue (Farsi). The items were in the form of declarative

statements rather than questions. Every item had 4 choices (very much, a lot, a little, a little bit). In addition, there was a picture of a colourful Sponge Bob on top of each choice. The participants were required to choose one of the choices according to the colour of the Sponge Bob. The colour of the Sponge Bob would decrease as the degree of agreement to each question declined in every choice. The Sponge Bob for the first choice (very much) was totally colourful, the Sponge Bob for the second choice (a lot) was half colourful, for the third choice (a little) only one third of the Sponge Bob was coloured and for the fourth choice (a little bit) approximately one fourth of the Sponge Bob was coloured. In fact, Sponge Bob was supposed to lead children through selecting the choice which was closer to their opinion or feeling about each statement.

According to Mihaljević Djigunović (2012), children sometimes find it difficult to express their thoughts, perceptions and feelings. Therefore, it is crucial that appropriate instruments and procedures be used for eliciting data on attitudes and motivation of young learners. To achieve this objective, usually smiley questionnaires are used with young learners. Since they include visual scales to which children can easily relate their idea or feeling, they are very age-appropriate for young learners. In these types of questionnaires, children choose a sad, happy or indifferent smiley according to how they think or feel about the language learning aspect in question.

Since the statements of the questionnaire in our study were not in line in terms of negativity and positivity of meaning, we couldn't use happy and sad smileys in the choices. So we decided to resort to a Cartoon character, which was supposed to be the favourite for the majority of children and we set the rate of its colourfulness as the criterion of selection for each choice.

The items of the questionnaire were assigned to their related categories according to the categories in the original questionnaire from which those items were adopted as well as the experts' judgment. As it is demonstrated in the table below, the 23 items are all related to factors which deal with different aspects of learners' reading skills.

Table 3.2.
Items and their related categories in early reading motivation questionnaire

	Category	Items
1	Items related to efficacy of reading	1,2,3,4
2	Items related to reading orientation	5,6,7,8
3	Items related to perceptions of difficulty in reading	9,10,11
4	Items related to learners' satisfaction with the teacher's method of teaching literacy	12,13
5	Items related to mastery orientation	14,15
6	Items related to cooperative orientation	16,17,18
7	Items related to competition orientation	19,20
8	Items related to reading anxiety	21,22,23

3.5.1. Administration of the Tests and the Questionnaire

At the end of the course, the tests and the questionnaire were administered to the students. In order not to exhaust the children, each test and the questionnaire were run in a separate session. Since the classes were taught by five different teachers, to avoid any teacher-effect on the students' performance, a coordinating session was held prior to the tests' administration and all the procedures for conducting the tests and the questionnaire were explained and reviewed.

When all the test/questionnaire papers were distributed among students, the teachers first explained the process of answering the questions and the required time span in learners' mother tongue (Farsi).

With regard to administering the Word Reading Test, the only session that we had enough time and were able to access each student individually was in their oral exam session. Thus, this test was run in the last session (final examinations session). Since the number of participants was too many and the students were in a hurry to leave the institute after their oral exam, to save time and avoid the children's crowd and noise, several researchers' assistants who were given detailed instructions by the researcher before joined to interview each student individually as for the reading test. Therefore, the researcher's assistants settled in the classrooms where the participants of the study had oral exam. This way, each child was given the reading test by one of the researchers' assistants before being interviewed for his/her oral test by the institute's interviewer. We tried to consider the basic principles of research while implementing each stage of the study. For instance, due to the time limitation we had in that session and in order not to exhaust and confuse students with too many unseen words, the test was designed in a way to achieve most by the fewest number of items possible. So instead of 42 items for representing each of the 42 letter sounds, 25 items were carefully selected to cover students' knowledge of all the 42 letter sounds. In addition, since all the items were unseen and the majority of students were under lots of stress pressure in that day due to their final and oral exam, to avoid any potential effect of stress and anxiety on the tests' results, each student was individually told by the researchers' assistants that their mark in this test would not have any effect on their final and oral exam. They were told that this test was only intended by their teacher to observe their reading improvement at the end of the course.

3.5.2. Scoring Procedures

In scoring the word reading test and the spelling test, every item was graded dichotomously: one point for a correct answer and zero for an incorrect one. There was also no negative point for the wrong or unanswered items. All the correct answers, therefore, were added up to a total sum of 25 and 42 as there were respectively 25 items in the reading test and 42 items in the spelling test.

For analysing experimental and control groups' data on the ERMQ, two different scoring schemes were employed: (i) *raw scores* or *raw ratings* and (ii) *weighted scores* or *weighted ratings*. *Raw scores* were identical with the actual number assigned to each point of the 4-point Likert scale (1 = *A little bit*, 2 = *A little*, 3 = *A lot*, and 4 = *very much*). *Weighted scores* were based on different weightings given to each point of the 4-point scale in the ERMQ. In order to determine the participants' *weighted scores*, separate scoring procedures were used for positively-loaded and negatively-loaded items. The scoring scheme for the 4-point Likert scale used in the motivation questionnaire was the following:

Table 3.1.
The scheme of weighted scores on the motivation questionnaire

Positively-loaded items	Negatively-loaded items
Very much = 4	*A little bit*= 4
A lot = 3	*A Little* = 3
A Little = 2	*A lot* = 2
A little bit = 1	*Very much* = 1

3.5.3. Reliability and Validity of the Tests and the ERMQ

Using Cronbach's alpha, the internal consistency (reliability) of the word reading test, the spelling test and the young learners' motivation questionnaire was estimated. The results respectively indicated the reliability index of 0.74, 0.82, and 0.766 for the word reading test, the spelling test and the ERMQ.

With regard to validity, both of the tests and the ERM questionnaire enjoy content validity by nature. Because the tests evaluate the literacy (reading and writing) skills of the students as were the primary aims of the study and the ERM questionnaire measures the reading motivational states of the young learners which is compatible with another objective of the study. However, a pilot study and experts' judgement were also conducted in order to become more certain about the validity of the tests and the questionnaire.

3.5.4. Pilot Study and Experts' Judgment

Before being administered to the participants, the word reading test, the spelling test and the Persian translation of ERM questionnaire were given to several M.A students, Ph.D. students and university teachers of the University of Isfahan in order to be examined, evaluated and edited in terms of content and face validity. The tests were subsequently qualified as being valid by the experts and a few items in the ERMQ were modified to meet the viewpoints of the experts.

After receiving the experts' judgment, the aforementioned researcher-made tests and the questionnaire were piloted with a similar group of zero beginners at the same age who were not the target participants of the study. Issues regarding

the administration, the required time, clarity of the tests and questionnaire items as well as their rubric were inspected in this pilot study.

The piloting phase of the study showed the young learners needed about 5 seconds to read each vocabulary item in the word reading test which meant that the word reading test required about 3 minutes for each child on average and a maximum time of 5 minutes for weaker students. Furthermore it was revealed that the learners respectively needed 20 and 10 minutes to complete the spelling test and the motivation questionnaire.

The pilot study also revealed that all the items and their related pictures in the spelling test were understandable to children. In addition, the size and the legibility of the font in both tests were shown to be appropriate for the students. It is worth mentioning that the font used for these two tests was Comic Sans MS which is particularly aimed for children because it writes all the letters in a model similar to the letters in the Starter Student Books.

Besides, two items in the ERM questionnaire were indicated as ambiguous for students in the pilot study. Therefore, these items were modified in order to be comprehensible to young learners.

3.6. Data Analysis

Six research questions were addressed in this study (See 3.2.2.). In order to answer the first, the second, the forth and the fifth research questions, an independent samples t-test was applied on the scores obtained from the word reading tests and the spelling tests of the students in each of the control and experimental groups.

The third and the sixth research questions were answered using descriptive statistics: mean and percentage analysis on the data collected from the ERMQ.

A detailed account of the data analysis and the statistical measures involved in it will be presented in Chapter Four.

3.7. Summary

This chapter presented a detailed description of the research design and methodology applied in this study to address the research questions and hypothesis. Besides, it provided a base line for the analysis of the results in the following chapter.

Chapter Four

Results

4.1. Introduction

This study was designed to find if synthetic multisensory approach to phonics (i.e. Jolly phonics instruction) in comparison with the traditional approach had any significant effect on young Iranian EFL learners' reading skills. Another aim was to investigate if using synthetic multisensory phonics in teaching literacy compared to traditional phonics had any significant effect on young Iranian EFL learners' spelling skills. Moreover, the present study tried to examine if there was a significant difference between the performances of girls and boys in the experimental group (i.e. the group to whom literacy was taught through Jolly Phonics) on the reading test. Furthermore, this study was an attempt to probe if the Jolly Phonics method could result in a significant difference between the performances of the girls and boys in the experimental group on the spelling test. The present inquiry also intended to explore if adopting synthetic multisensory phonics for teaching literacy could lead to a higher motivation of learners towards early reading. Next, this research aimed to consider if the synthetic multisensory approach of Jolly Phonics method would affect girls' and boys' reading motivation differently.

To achieve these aims, this chapter presents the results of the analysis of the obtained data. The chapter explains the data treatment for each type of the literacy teaching approaches employed in this study and presents the scores from each of the reading and spelling tests as well as those of the Early Reading Motivation

Questionnaire (ERMQ). The hypotheses, previously formulated in chapter one, are reiterated and investigated in order. In each part the data will be displayed, the hypotheses of the study will be tested, and the results will be stated. Finally, the chapter concludes with the summary of the results of this study. Table 4.1 below shows the descriptive statistics of the present study.

Table 4.1.

Descriptive statistics of the experimental and control groups on spelling, reading, and ERMQ

			N	Minimum	Maximum	Mean	Std. Deviation
Experimental	Boy	Spelling	25	21	42	34.80	5.20
		Reading	25	14	23	18.60	3.01
		ERMQ	25	80	92	87	3.20
	Girl	Spelling	25	29	42	36.24	4.41
		Reading	25	13	24	18.28	2.77
		ERMQ	25	77	90	84.16	4.12
	Total	Spelling	50	21	42	35.52	4.83
		Reading	50	13	24	18.44	2.87
		ERMQ	50	77	92	85.58	3.92
Control	Boy	Spelling	25	12	34	21.44	6.80
		Reading	25	4	19	11.64	4.15
		ERMQ	25	68	90	80.16	4.96
	Girl	Spelling	25	11	37	25.68	7.24
		Reading	25	5	21	10.76	3.50
		ERMQ	25	57	92	78.96	7.27
	Total	Spelling	50	11.00	37.00	23.56	7.27
		Reading	50	4.00	21.00	11.20	3.82
		ERMQ	50	57	92	79.56	6.19

Regarding the reading test, the total mean score of children in the Jolly Phonics (JP) group was 18.44 and that of the control group was 11.20. The mean score of the reading test for the girls in the experimental and control group were 18.28 and 10.76 respectively. The mean score of the reading test for the boys of experimental and control group were respectively 18.60 and 11.64. The summary of the data is also illustrated in Figure 4.1 below:

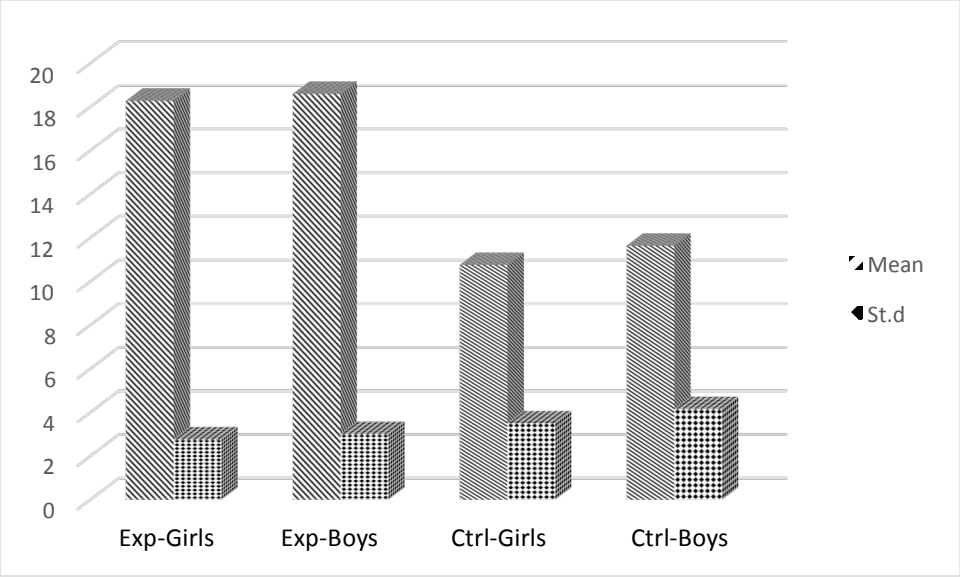

Figure 4.1. The mean and standard deviation of the scores of girls/boys on the reading test in the experimental/control group

With regard to the spelling test, the total mean score of the participants in the JP group and control group were 35.52 and 23.56 respectively. The mean score of the spelling test for the girls of the experimental and control group were respectively 36.24 and 25.68. The mean score for boys of the experimental and control group on the spelling test were respectively 34.80 and 21.44. The data is also briefly displayed in Figure 4.2 below:

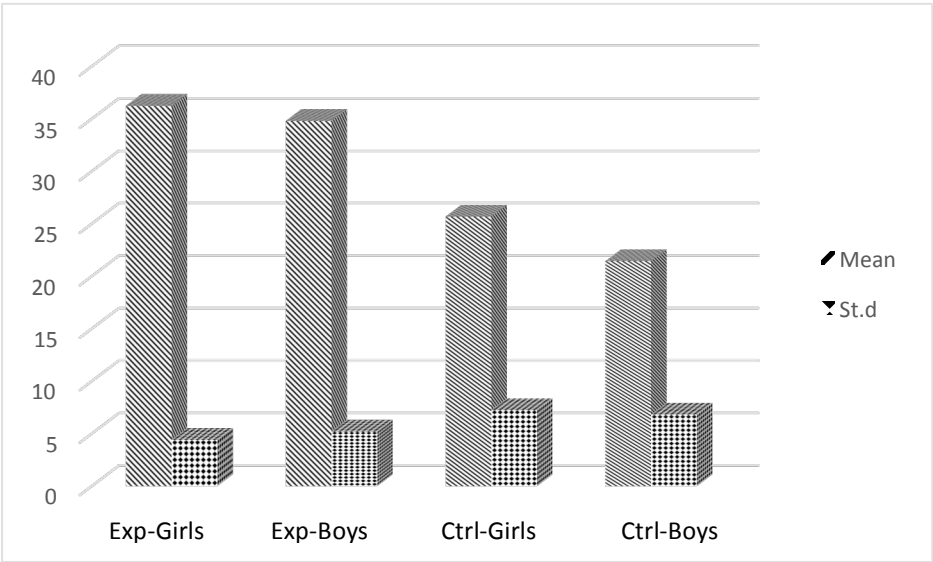

Figure 4.2. The mean and standard deviation of the scores of girls/boys on the spelling test in the experimental/control group

The total mean score of ERMQ for students in the experimental group (JP group) was 85.58 and for those in the control group was 79.56. The mean score of the

questionnaire for the girls of experimental and control group were respectively 84.16 and 78.96. The mean score of the questionnaire for the boys of experimental and control group were respectively 87 and 80.16. Figure 4.3 also demonstrates this data below:

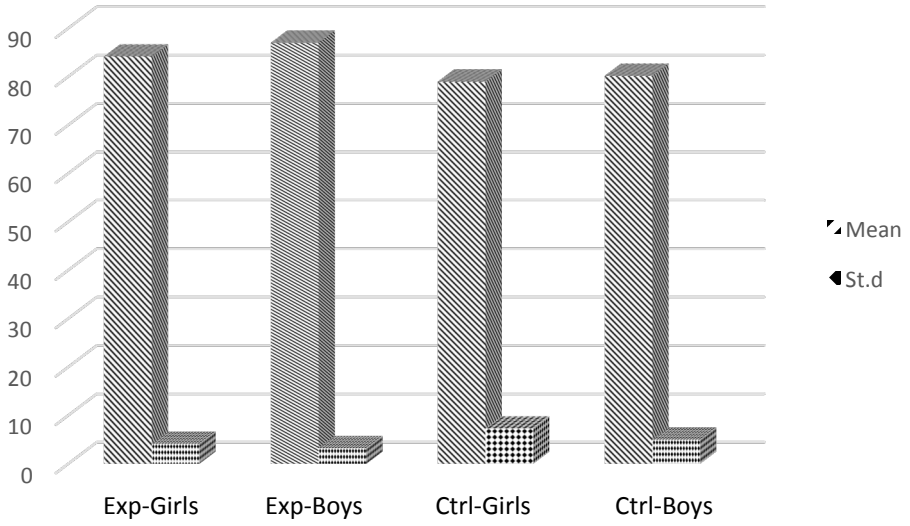

Figure 4.3. The mean and standard deviation of the scores of girls/boys on the ERMQ in the experimental/control group

Before calculating the required inferential statistical analyses, initial analyses were performed to investigate violation of the assumptions of normality employing Kolmogorov-Smirnov test (see Table 4.2).

Table 4.2.
Tests of normality

		Experimental						Control					
		Boy		Girl		Total		Boy		Girl		Total	
		Spelling	Reading	Spelling	Reading	Spelling	Reading	Spelling	Reading	Spelling	Reading	Spelling	Reading
Kolmogorov-Smirnov	Statistic	.121	.166	.168	.140	.124	.122	.143	.073	.132	.202	.109	.137
	Sig.	.200	.074	.066	.200	.052	.060	.200	.200	.200	.010	.190	.020

The results of the Kolmogorov-Smirnov test, illustrated in Table 4.2, showed that the null hypothesis indicating the normality of the scores is rejected (i.e. $p < 0.05$) as far as total reading scores and girls' reading scores in the control group are concerned. As for other scores, however, no violation of the assumptions of normality was found.

4.2. The Effect of Jolly Phonics Method on Learners' Reading Skills

The first research question aimed to investigate if the synthetic multisensory approach to phonics in comparison with traditional approach had any significant effect on young Iranian EFL learners' reading skills. In order to answer this question, the following null hypothesis was formulated.

Hypothesis 1: The synthetic multisensory approach (Jolly Phonics method) adopted for teaching early literacy does not have any significant effect on reading skills of Iranian EFL children.

In order to investigate this hypothesis, due to the violation of assumptions of normality (see Table 4.2), Mann-Whitney U Test was used to find out the effect of synthetic multisensory approach to phonics in comparison with traditional approach on young learners' reading skills. The results are presented in Table 4.3.

Table 4.3.
Mann-Whitney U Test on the mean scores of experimental and control group for the reading test

Reading	N	Mean Rank	Sum of Ranks
Experimental	50	71.98	3599.00
Control	50	29.02	1451.00
Total	100		
Mann-Whitney U	176.000		
Z	-7.422		
Asymp. Sig. (2-tailed)	.000		

The results of the Mann-Whitney Test in Table 4.3 revealed that there was a statistically significant difference between the experimental and control groups regarding their reading test, $z = -7.42$, $p < 0.05$. As shown in the Table, the reading test mean scores for the experimental group ($M = 71.98$) were greater than the mean scores of the reading test in the control group ($M = 29.02$).

Regarding the difference between the experimental and control groups on the reading test scores, Mann-Whitney Test results indicated that the experimental group gained higher scores on the reading test in comparison to the control group. Thus, the first null hypothesis, stating that synthetic multisensory approach to phonics in comparison with traditional approach does not have any significant effect on young Iranian EFL learners' reading skills is rejected.

An independent samples t-test was calculated for the scores of reading tests for the boys in the experimental and the control groups. Before calculating the t-test, initial analyses were performed to ensure that the assumptions of normality were not violated (see Table 4.2). Subsequently, an independent-samples t-test analysis

was used to find the difference between the two groups of boys regarding their reading tests, the results of which are presented in Table 4.4:

Table 4.4.
Independent samples t-test for the boys' reading test in the experimental and control groups

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Equal variances assumed	1.667	.203	6.783	48	.000	6.96

The results of the t-test in Table 4.4 revealed that there is a statistically significant difference between reading tests scores for the boys in the experimental and the control groups, $t(48) = 6.78$, $p<0.05$. As the table shows, the reading test mean scores for the experimental group were greater than the reading test mean scores for the control group (MD = 6.96).

Based on the observed results, it can be concluded that the boys in the experimental group gained higher scores on the reading test in comparison to the control group, and that the difference between reading tests scores for the boys in the experimental and the control groups was statistically significant.

A Mann-Whitney U Test was run on the scores of the reading test for the girls in the experimental and the control groups (see Table 4.2 for the violation of assumptions of normality). The minimum alpha for confirmation of the research hypothesis was .05. The results from Mann-Whitney U Test are reported in Table 4.5:

Table 4.5.
Independent samples t-test for the girls' reading test in the experimental and control groups

Reading	N	Mean Rank	Sum of Ranks
Experimental	25	36.76	919.00
Control	25	14.24	356.00
Total	50		
Mann-Whitney U	31.000		
Z	-5.480		
Asymp. Sig. (2-tailed)	.000		

The results illustrated in Table 4.5 show that there was a statistically significant difference between reading tests scores for the girls in the experimental and the control groups, z = -5.48, p< 0.05. The girls' reading test mean scores for the experimental group (M = 36.76) were greater than the girls' reading test mean scores in the control group (M = 14.24).

As thus, based on the obtained results in this section, it can be concluded the girls in the experimental group obtained higher scores on the reading test in comparison to the control group, and that the difference between reading tests scores for the girls in the experimental and the control groups was highly significant.

4.3. The Effect of Jolly Phonics Method on Children's Spelling Skills

The second research question investigated if the synthetic multisensory approach to phonics in comparison with the traditional approach has a significant effect on young Iranian EFL learners' spelling skills. The following null hypothesis was formed to address this research question.

Hypothesis 2: The synthetic multisensory approach (Jolly Phonics method) adopted for teaching English literacy does not have any significant effect on spelling skills of Iranian EFL children.

Independent samples t-test was run in order to examine hypothesis 2. Preliminary analyses were performed to ensure that the assumptions of normality were not violated (see Table 4.2). The results of the t-test are presented in Table 4.6:

Table 4.6.

Independent samples t-test for the spelling test of experimental and control groups

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Equal variances not assumed	13.135	.000	9.679	85.171	.000	11.96000

The results illustrated in Table 4.6 shows that there is a statistically significant difference between the experimental and control group concerning their spelling scores, t(85.171) = 9.67. As the table illustrates the spelling test mean scores for the experimental group were higher than the spelling test mean scores for the control group (MD = 11.96).

Analysis of the obtained results indicated that the experimental group gained higher scores on the spelling test in comparison to the control group. Consequently, hypothesis 2 is rejected.

Another independent samples t-test was computed to compare the mean scores of boys on the spelling test in each of the control and experimental groups. There is an issue associated with the use of t-test. Before calculating the t-test, initial analyses were performed to ensure that the assumptions of normality were not violated (see Table 4.2). Afterwards, a t-test analysis was used to determine the difference between the performances of the boys in the experimental group and the control group on the spelling test. The results are presented in Table 4.7:

Table 4.7.

Independent samples t-test for the boys' spelling test in the experimental and control groups

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Equal variances assumed	2.948	.092	7.796	48	.000	13.36000

Table 4.7 shows that there is a statistically significant difference between spelling tests scores for the boys in the experimental and the control groups, t (48) = 7.79, p<0.05. As the table shows, the spelling test mean scores for the experimental group were higher than the spelling test mean score for the control group (MD = 13.36).

Analysis of the results obtained from the independent samples t-test revealed that the boys in the experimental group gained greater scores on the spelling test in comparison to the boys in control group, the difference between spelling tests scores for the boys in the experimental and the control groups was highly significant.

Another independent samples t-test was run in order to probe the difference between the performances of the girls in the experimental group and the control group on the spelling test. Preliminary analyses were performed to ensure about the assumptions of normality (see Table 4.2). The results of t-test are given in Table 4.8:

Table 4.8.
Independent samples t-test for the girls' spelling test in the experimental and control groups

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Equal variances not assumed	8.769	.005	6.223	39.687	.000	10.56

T-test analysis reported in Table 4.8 shows that there is a statistically significant difference between spelling tests scores for the girls in the experimental and the control groups, t (39.68) = 6.22, $p< 0.05$. As shown in the table, the spelling test mean scores for the experimental group were greater than the spelling test mean scores for the control group (MD = 10.56).

Concerning the difference between the experimental and control group, the results of the independent samples t-test revealed that the girls in the experimental group obtained higher scores on the spelling test in comparison to the girls in the control group.

4.4. The Effect of Jolly Phonics Method on Learners' Reading Motivation

The third research question aimed at finding out whether adopting a synthetic multisensory phonics (i.e. JP) in teaching literacy compared to the traditional phonics had a significant effect on increasing young Iranian EFL learners' reading motivation. In order to answer this question, the following null hypothesis was proposed.

Hypothesis 3: The Jolly Phonics instruction adopted for teaching phonics to children cannot significantly enhance young learners' early reading motivation.

To test this hypothesis, the data obtained through the scores of ERMQ in each group were put into Mann-Whitney U Test. Table 4.9 represents the Mann-Whitney U Test applied to the means:

Table 4.9.

Mann-Whitney U Test on the mean scores of experimental and control group on the ERMQ

Reading motivation	N	Mean Rank	Sum of Ranks
Experimental	50	65.48	3274.00
Control	50	35.52	1776.00
Total	100		
Mann-Whitney U	501.000		
Z	-5.173		
Asymp. Sig. (2-tailed)	.000		

As it is shown in the table above, the mean score of the 50 students in the experimental group is 65.48 and the mean score of the 50 learners in the control group is 35.52. Furthermore, $p=0$, i.e. $p<0.05$, which is significant. Thus, it is concluded that there is a significant difference between the reading motivation of the students in the control and those in the experimental group. In other words, those young learners who learnt early English literacy skills through the synthetic multisensory phonics approach were more motivated in English reading than those who were taught literacy skills through the traditional phonics approach.

For comparing the mean scores of boys in each of the experimental and control groups, another Mann-Whitney U Test was run, as given in Table 4.10 in the following:

Table 4.10

Mann-Whitney U Test on the mean scores of boys' ERMQ in the experimental and control group

Reading motivation	N	Mean Rank	Sum of Ranks
Experimental	25	31.42	785.50
Control	25	19.58	489.50
Total	50		
Mann-Whitney U	164.500		
Z	-2.878		
Asymp. Sig. (2-tailed)	.004		

According to the table, the mean score of the 25 boys in the experimental group is 31.42 whereas the mean score of the 25 boys in the control group is 19.58. Moreover, the p value is 0.004 ($p=0.004$), i.e. $p<0.05$, which displays a significant difference between the mean scores of the boys in the experimental and control groups.

Another Mann-Whitney U Test was used to compare the mean scores of girls' ERMQ in each of the control and experimental groups, as shown in Table 4.11.below:

Table 4.11.
Mann-Whitney U Test on the mean scores of girls in the experimental and control group

Reading motivation	N	Mean Rank	Sum of Ranks
Experimental	25	35.02	875.50
Control	25	15.98	399.50
Total	50		
Mann-Whitney U	74.500		
Z	-4.629		
Asymp. Sig. (2-tailed)	.000		

As it is demonstrated in the above table, the mean score of the 25 girls in the experimental group is 35.02 and the mean score of the girls in the control group is 15.98. The P value is 0 (p=0), i.e. $p<0.05$, which shows a significant difference between the mean scores of girls in the experimental and control groups.

4.5. The Effect of JP Method on Girls' and Boys' Performances on the Reading Test

The forth research question explored whether there is a significant difference between the performances of the girls and the boys in the experimental group (i.e. the group to whom literacy was taught through Jolly Phonics) on the reading test. As mentioned in chapter one, in order to answer this question, the following hypothesis was made.

Hypothesis 4: There isn't any significant difference between the performances of boys and girls in the experimental group (i.e. the group who received Jolly Phonics as the treatment) on the reading test.

In order to address hypothesis 4, a Mann-Whitney U test was calculated for the scores of the reading tests for the boys and the girls in the experimental group (see Table 4.2 for the violation of the assumptions of normality). The results are illustrated in Table 4.12:

Table 4.12.

Mann-Whitney U Test on the means scores of the girls' and boys' reading test in the experimental groups

Reading Experimental	N	Mean Rank	Sum of Ranks
Boy	25	26.04	651.00
Girl	25	24.96	624.00
Total	50		
Mann-Whitney U	299.000		
Z	-.264		
Asymp. Sig. (2-tailed)	.792		

The results presented in Table 4.12 indicated that there was not any statistically significant difference between the boys and the girls regarding their reading tests scores in the experimental group, $z = 0.79$, $p > 0.05$. As shown in the Table, the boys' reading test mean score in the experimental group was $M = 26.04$ and the girls' reading test mean score was $M = 24.96$. Consequently, null hypothesis 4 is confirmed.

4.6. The Effect of JP Method on Girls' and Boys' Performances on the Spelling Test

The fifth research question examined whether there is there a significant difference between the performances of the girls and the boys in the experimental group (i.e. the group to whom literacy was taught through Jolly Phonics) on the spelling test. For answering this question, the following hypothesis was suggested.

Hypothesis 5: There isn't any significant difference between the performances of the girls and the boys in the experimental group (i.e. the group who received Jolly Phonics as the treatment) on the spelling test.

An independent samples t-test was run in order to investigate the difference between the performances of the girls and the boys in the experimental group on the spelling test (i.e. hypothesis 5). Initial analyses were performed to ensure no violation of the assumptions of normality (see Table 4.2). The results of the t-test are presented in Table 4.13:

Table 4.13.

Independent samples t-test for the girls' and boys' spelling test in the experimental groups

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Equal variances assumed	.353	.555	-1.055	48	.297	-1.44000

The t-test analysis reported in Table 4.13 shows that there was not any statistically significant difference between the boys and the girls regarding their spelling tests scores in the experimental group, t (48) = -1.05, p> 0.05. As the Table illustrated, the mean difference was MD = -1.44.

Regarding the difference between the girls and the boys in the experimental group on the spelling test, the independent samples t-test revealed that there was not any statistically significant difference between the boys and the girls regarding their spelling tests scores in the experimental group. Therefore, the null hypothesis 5 indicates that there is not any significant difference between the performances of the girls and the boys in the experimental group on the spelling test; hence the hypothesis is confirmed.

4.7. The Effect of JP Method on the Evaluations of the ERMQ Made by Girls and Boys in the Experimental Group

The sixth research question investigated whether there was a significant difference between the evaluations made by the girls and the boys in the experimental group of the ERMQ. The following hypothesis was formulated to answer this question:

Hypothesis 6: There isn't any significant difference between the evaluations made in the early reading motivation questionnaire by girls and boys in the experimental group (i.e. the group to whom literacy was taught through Jolly Phonics).

In order to examine the above hypothesis, Mann-Whitney U Test was used, as given below in Table 4.14:

Table 4.14.
Mann-Whitney U Test on the scores of boys and girls in the experimental group

Reading motivation Experimental	N	Mean Rank	Sum of Ranks
Boy	25	30.40	760.00
Girl	25	20.60	515.00
Total	50		
Mann-Whitney U	190.000		
Z	-2.386		
Asymp. Sig. (2-tailed)	.017		

As it is displayed in the table above, the mean score of the 25 boys in the experimental group is 30.4 while the mean score of girls is 20.6. Besides, the P value is 0.017 ($p=0.017$), i.e. $p<0.05$, which shows a significant difference between the scores of girls and boys in the experimental group. Therefore, it can be concluded that by using the Jolly Phonics method for teaching English literacy, boys became more motivated to learn early English reading skills than girls.

4.3. Summary of the Results

This chapter presented the results of the current study according to the research questions. Regarding the first research question, the results showed that the synthetic multisensory phonics (i.e. Jolly phonics instruction) in comparison with traditional approach had a significant effect on young Iranian EFL learners' reading skills, and the experimental group gained higher scores on the reading test in comparison with the control group. Therefore, this finding led to the rejection of the first null hypothesis stating that synthetic multisensory approach to teaching phonics in comparison with traditional approach does not have any significant effect on young Iranian EFL learners' reading skills.

Analysing the results of the second research question with regard to the effect of synthetic multisensory approach to phonics in comparison with traditional approach on young Iranian EFL learners' spelling skills, deductions could be made that adopting a synthetic multisensory approach to phonics (i.e. JP method) in teaching early literacy compared with the traditional phonics had a significant effect on young Iranian EFL learners' spelling skills, and the experimental group gained greater scores on the spelling test than the control group. Consequently, the second hypothesis which claimed that synthetic multisensory approach to phonics in comparison with the traditional phonics approach does not have any significant effect on young Iranian EFL learners' spelling skills was rejected.

With regard to the third research question, the evaluations of the ERM questionnaire made by all the participants revealed that there was a significant

difference between the evaluations of the experimental group and those of the control group, indicating that the JP instruction led to a higher reading motivation of the children.

Furthermore, concerning the forth research question, the results showed that there was not any statistically significant difference between the girls and the boys regarding their reading tests scores in the experimental group. Therefore the forth null hypothesis, indicating there is not any significant difference between the performances of the girls and the boys in the experimental group on the reading test, was confirmed.

As for the fifth research question considering the difference between the performances of the girls and the boys in the experimental group on the spelling test, results indicated that there was not any statistically significant difference between the boys and the girls regarding their spelling tests scores in the experimental group.

Finally, the sixth research question concerning evaluations of the ERM questionnaire made by the girls and boys in the experimental group displayed a higher reading motivation for male young learners.

The following chapter will encompass a thorough discussion of the obtained results, conclusions and implications that may be drawn out of the findings.

Chapter Five

Discussion, Conclusion and Implications

5.1. Overview

In the previous chapter, the obtained results were indicated in tables and each research question was discussed separately. In this chapter, the researcher will first restate the problem under focus. Then, a summary of findings will be provided. In the subsequent section, the findings and how they agree with those of previous studies will be discussed in detail. Following the concluding part, the implications and applications of the study, limitations of this research, and suggestions for further research in related area will be presented. Finally, the researcher will provide the reader with a summary of this chapter.

5.2. Restatement of the Problem

As discussed in previous chapters, learning to read and write in an international language such as English is considered as an urgent necessity. Kachru (1994, p. 136) has referred to English as "the language of mobility", which means that "it gives access to avenues which might otherwise be closed" (Kuo, 2011, p.15). Although, conversational and communicative capabilities might satisfy one's needs in an occasional journey to an English-speaking country, it is the literacy competence in English which can result in true mobility. This mobility could range from "work opportunities to text-based communications to access to research and literature" (Kuo, 2011, p. 15).

Over the years, there has been a controversy surrounding the best way of teaching literacy in English-speaking countries. Following the adoption of phonics

as the method of teaching literacy in countries like US and UK (Gregory, 2008; Harrison, 2004), and in Australia and New Zealand (Bowey, 2006), phonics attracted attention in non-native (i.e. ESL/EFL) contexts too. However, despite the substantial body of research advocating the success of phonics instruction in teaching literacy especially the efficacy of synthetic and multisensory approaches to phonics (Bowey, 2006; Donnell, 2007; Gaskins, Downer, Anderson, Cunningham, Gaskins & Schommer, 1988; Grant, 1998; Johnston & Watson, 2005; Mohler, 2002; Salfer, 2006; Sumbler & Willows, 1996; Trezek, et al., 2007), the literature revealed shortcomings in validation of synthetic multisensory phonics instruction in EFL contexts specifically in Iran.

Since English is a foreign language in Iran, students' exposure to English is almost limited to the classroom setting. Unfortunately, due to the failure of Ministry of Education in teaching English as one of the main subjects of the school courses, the quality of English education in schools is very poor and that results in students and their parents turning into language institutes for good education. English teaching in language institutes is much better compared to that of schools; still there is no systematic observation of children's literacy learning. Phonics which has been recognized and chosen as the best method of teaching literacy especially in English speaking countries (Burkard, 1999), is not practiced systematically and in the right way. Rather, most English institutes use the traditional phonics instruction which is based on rote repetitions and therefore turns out to be boring and sometimes even demotivating for children since they can't apply their by-rote learning to new unseen words. The teachers' incompetence in presenting appropriate phonics methods, and the inconsistency and irregularity of English writing system adds to the gravity of this situation.

To address the problems pointed out, the present study sought the solution in adopting a synthetic multisensory approach to phonics (i.e. Jolly phonics) which has been proved to be effective and motivating for young learners in previous studies (e.g. Eshiet, 2012 ; Shepherd, 2013). This quasi-experimental study investigated the possible effects of synthetic multisensory method of jolly phonics on the literacy (i.e. reading and writing skills) attainment and enhancing the early reading motivation of Iranian young learners of English. In the following sections, the main conclusions drawn out of the findings will be discussed.

5.3. Summary of Findings

As a result of the data analysis carried out in chapter four, a number of findings emerged; the synthetic multisensory method of Jolly Phonics in comparison with the traditional approach to phonics led to the higher literacy attainments of Iranian young learners of English. This synthetic multisensory phonics used for teaching basic literacy skills also indicated to have significant effects on increasing children's early motivation towards word reading skills in English.

Regarding the effects of this synthetic multisensory phonics instruction on gender differences, the method turned out to have approximately equal effects on both male and female learners' reading and writing performances in the experimental group who received the JP programme as the treatment. The only gender difference that appeared as a result of the JP instruction was the higher reading motivation of boys compared to girls in the experimental i.e. JP group. In the next section, a thorough discussion of the possible reasons for the obtained results as well as the comparison of our findings with those of the similar studies in the literature will be provided.

5.4. Discussion and Conclusion

The primary purpose of this research study was to inquire into possible effects of adopting a synthetic multisensory phonics approach (i.e. Jolly Phonics) in teaching early literacy skills on children's literacy attainments as well as their motivation for reading in early stages. It, also, intended to find out whether this approach to teaching phonics affects girls' and boys' literacy learning and reading motivation differently. The descriptive along with interferential statistics showed that the experimental group who had received the JP intervention performed significantly better on reading and spelling tests than the control group who were taught literacy through ordinary methods organized over rote traditional phonics. These findings were in accordance with similar trials which were run in English-speaking countries such as Canada (Sumbler & Willows, 1996), England (Grant, 1998) and Scotland (Johnston & Watson, 2005) and their results revealed that the JP groups showed substantial advantages on every measure of literacy including word reading, spelling and even reading comprehension. Our results were also in agreement with those of the studies conducted in ESL contexts or on ESL students. Stuart (1999) carried out a study with 112 five-year-old pupils, 96 of whom were ESL learners and found that the JP children were significantly ahead of the control ones on standardized tests of reading and spelling. Tooley and Hunt (2005) came up with similar results in their research with 500 ESL students of low-income schools in Hyderabad, India. After six months, the pupils who had experienced the JP programme had statistically higher scores on reading, spelling and spelling tests. Similarly, the findings of the study by Ekpo et al. (2007) on 168 primary-one Nigerian pupils showed that the experimental i.e. JP group obtained from 3-29 months reading age in the Burt Reading Test at the end of the 36-week treatment. Moreover, in line with Dixon et al. (2011), who studied the effects of JP intervention on 500 children's literacy skills of low-income areas in India and were turned up with significant improvements of the experimental students in reading and spelling tests, the present study came up with similar results. Furthermore, Eshiet (2012) looked into the possible effects of Jolly phonics on the improvements of Nigerian pupils' reading skills. The findings showed extremely positive effects on children's reading achievement. Our findings also accorded with Shepherd (2013) who investigated the effects of JP programme on increasing basic literacy skills of Nigerian primary school pupils. The results of her study indicated that after the 8-month treatment, the children in JP groups performed at

a much higher level on the assessments than those who received their normal literacy instruction.

The findings of our study were also in agreement with those of the research studies which examined the effects of other multisensory approaches to literacy than JP on both students with special needs such as low-ability or hearing impaired children and English language learners (ELL). Gaskins et al. (1988), Mohler (2002), Salfer (2006), Donnell (2007), and Folakemi and Adebayo (2012) respectively investigated the effects of multisensory phonics instruction on decoding skills of poor readers in grades 1 through 8 in Pennsylvania, on literacy improvements of 25 low-ability, high-risk 7-graders in Nebraska, at-risk kindergarten children in Ohio, under-achieving third-graders in Kansas city, and under-achieving Nigerian secondary school students and they all arrived at positive results supporting the successful effects of multisensory approaches on the literacy improvements of students with special needs. Likewise, Trezek et al. (2007), and Van Staden (2013) respectively inquired into the effects of multisensory visual phonics on reading improvement, and the effects of sign language and multisensory coding on word learning and reading comprehension of deaf and hard of hearing children. The results of their studies demonstrated significant increases in reading skills and vocabulary learning of deaf and hearing-impaired students.

Much like the students with special needs, the present study turned up with similar results the same as previous studies which were carried out with ELL pupils. For instance, Schneider and Evers (2009) conducted a study in which they made use of multiple multisensory structured language (MSL) teaching strategies with several ESL students. They concluded that MSL instruction showed promising results for struggling ELLs.

In addition, our outcomes were highly in accordance with the findings reached by other empirical studies which employed other synthetic phonics methods rather than Jolly Phonics in both L1 and ESL/EFL contexts. Ehri et al. (2001) in a study commissioned by the U.S congress from the National Reading Panel evaluated the effectiveness of early reading instruction programmes by investigating all reputable studies using effect size statistics. The results displayed that the synthetic phonics instruction produced a significant effect size of 0.45. Shue (2008) explored the effects of explicit i.e. synthetic phonics instruction on the phonological awareness, blending and segmenting skills of 34 EFL second-graders in Taiwan. The findings revealed that after one semester of the intervention, the subjects had improved in phonological awareness, VC blending and phoneme-segmentation tasks. In a similar way, Kodae and Laohawiriyanon (2011) probed the efficacy of intensive synthetic phonics teaching on reading and spelling attainments of EFL Thai 5-graders. After the 8-week treatment, the results suggested that both middle and low-achievers had greatly benefited from the programme.

However, our findings were not in line with Landrel (2000), Walton et al. (2001), Spencer and Hanley (2003), Torgerson et al. (2006), Wyse and Style (2007), Goswami (2007), and Wyse and Goswami (2008) who asserted that due to the phonological complexity and inconsistency of English writing system, it is highly unlikely that one method of teaching phonics such as synthetic phonics will be superior to another and will produce outstanding results in literacy acquisition of children. In the same way, Foorman et al. (1997) obtained partially the same results stating that "synthetic phonics facilitates skill in phonological analysis relative to analytic phonics and sight word methods, but this facilitation does not appear to transfer gains in word reading" (p. 72). Nevertheless, unlike what was pointed out in the abovementioned studies, the synthetic phonics method of JP led to children's significant gains in both word reading and spelling in our study. The possible explanation for the variations in results of the present study and those of the others is just the same as what Goswami (2005, 2007) highlights that some English words like *'yacht'* cannot be easily recoded by synthetic phonics and must be learnt as distinct or holistic patterns, although Jolly Phonics applies a synthetic phonics approach but it also teaches the 'tricky words' which have irregular spellings separately. As a result, the learning of sight words i.e. the irregularly spelt words which cannot be decoded by blending and segmenting skills are also covered in the JP method. Besides, in addition to the short vowels, the diagraphs which are most of the time problematic for children and are usually overlooked in the traditional approaches are taught in the JP instruction. Likewise, after pinpointing the irregular spelling of English as the main source of children's failure in literacy learning, Jolly (2014) presents the synthetic phonics as the key to successful teaching of literacy learning as following:

> Nowadays the teaching of *digraphs* is seen as essential, as is the teaching of the sound of each letter, rather than just its name. This is key to synthetic phonics teaching. Such teaching does seem to be having a profound effect on illiteracy levels. However it is known that such teaching lifts all children, whatever their social background, and whether English is their first language, with boys doing as well as girls. It is common now for teachers to find they have no children at the end of their first year at school who have a reading age below their actual age ("The Difficulty of English", para. 10).

He further explains that despite not being able to assure that synthetic phonics can compensate for all the inconsistencies in the English writing system and overcome all the difficulties in literacy learning, it can however reduce the number of struggling learners: "It will never overcome the illogical legacy of English spelling, but it does mean that we can expect far fewer children to fail" ("The Difficulty of English", para. 11).

In addition, as Lloyd (2012) puts forward, when you memorize a word rather than blend it (as is usual in whole words methods) it goes the wrong way. In other words, a memorized word goes to the right hemisphere of the brain which has a

limited space. The maximum that a human brain can manage to store and memorize is about 2500 words. If you use the first letters as a helping sign, it goes to about 5000 words that is equal to the reading age of nine which is not enough for the educational success of children. On the other hand, if you blend a word for several times, it goes to the left hemisphere which is the place good readers use for decoding and storage. That is when you can memorize well and have this automatic recall for millions of words and this happens because the word is processed rather than memorized.

According to Lloyd (2012), the results of a whole word experiment revealed that after a synthetic phonics intervention, the left hemisphere of students grew and their right hemisphere diminished. So, if you use the left hemisphere, it will expand. Synthetic phonics teaches the alphabetic code from the beginning and applies it to reading and writing. It starts simply with a few letter sounds and gradually builds up to the more complex understanding of the alphabetic code. She further pinpoints that the Jolly Phonics programme leads to more successful literacy learning of children by applying a combination of synthetic and multisensory approaches to phonics. The blending and segmenting (like holding up a finger for each sound) activities, the letter sounds stories and songs, doing the actions when practising the letter sounds, air writing, and ect. keep children on task and engaged in the process of learning.

With regard to the gender differences in literacy learning, partly in line with Johnston and Watson (2005) who came up with female and male second-graders reading and spelling words equally well, the JP instruction generated no significant sex differences in reading and spelling abilities of our participants. However, Johnston and Watson (2005) in their longitudinal study which was conducted over the 7 years of primary school (from primary 1 to 7), found that boys surpassed girls in word reading in primary 3 and by primary 7 the boys were reading 11 months ahead of the girls. In primary 4, 6 and 7, the boys also outperformed girls in spelling and by primary 7 were 6-8 months ahead. These findings which indicate that boys are better readers and spellers are in contrast with ours that showed no significant difference between girls' and boys' literacy abilities. This may be to some extent because of the fact that Johnston and Watson's study was a longitudinal one which occurred during a much longer period of time. Therefore, it can be concluded that in a long run the JP method may produce different results with regard to the gender differences in literacy which definitely needs to be further investigated. Our findings also partly accorded with Johnston et al. (2011) who made a comparison between 10-year-old boys and girls who had received analytic or synthetic phonics methods as part of their early literacy programme. The boys taught by the synthetic phonics programme were as good as girls in spelling but had better word reading than girls. Johnston et al. (2011) argue that although boys have been considered to have inferior literacy skills than girls over the years, synthetic phonics teaching in this study has caused boys to perform equally well in spelling and even do better in word reading than girls. To justify these claims which are also partially in

agreement with our findings, Johnston et al. (2011) propose that the reason for reaching these results is the 'neural substrate' underlying them. Burman, Bitan, and Booth (2008) in a study of 9-15 year old children, found that " boys' processing of printed words was associated with the activation of areas of the brain concerned with visual processing, and spoken words were processed in areas concerned with auditory and phonological processing. That is, their pattern of activation was modality specific, which may imply a lack of integration of visual and phonological information. Girls' performance, on the other hand, was correlated with activation in supramodal areas of the brain during the reading and spelling tasks. Boys did also show activation in these areas, but at a lower level, and it was not associated with task performance" (Burman et al., 2008 as cited in Johnston et al., 2011, p. 1381). Thus, Burman et al. (2008) concluded that "language processing was more abstract in girls and more sensory in boys. Synthetic phonics teaching may aid boys in learning to integrate visual and phonological information, thus bringing up their spelling levels to those of girls, and also boosting their word recognition skills. Mixed methods/analytic phonics approaches may not be so effective at overcoming boys' problems in making these links" (Burman et al., 2008 as cited in Johnston et al., 2011, p. 1381). Therefore, according to Johnston et al. (2011), p. 1381, we can come to the conclusion that since word reading entails 'the integration of visual and phonological information even in an opaque orthography', synthetic phonics appears to be more effective because from the very early on 'it develops the integration of information from these two modalities, and this may be particularly beneficial for boys'. On the other hand, the eclectic and analytic phonics approaches can result in some children reading mostly by a kind of sight word reading which is affected only by superficial associations between sounds and print. These superficial connections are caused by early sight word elements and the late teaching of sounding, blending and segmenting in these methods.

As for the students' reading motivation, the results of data analysis for the ERMQ indicated that jolly phonics method contributed to enhancing young learners' early reading motivation. Regarding the gender differences in reading motivation, the results arrived at by analysing the results of ERMQ suggested that the synthetic multisensory phonics (i.e. Jolly phonics) contributed to boys' reading motivation more than girls'. This finding opposes Baker and Wigfield (1999) who found out a gender effect in fifth and sixth-grade students for nine different reading motivation dimensions, with girls displaying higher motivational scores than boys. It also contrasts with McKenna (2001) that came up with some results in terms of reading attitudes which suggested that girls possessed more positive attitudes than boys. Moreover, as opposed to Mazzoni et al. (1999) that came up with girls showing higher reading motivational scores in first and second grades, our study discovered boys to be more motivated in reading. However, this finding is partly in agreement with Wigfield and Guthrie (1997) who concluded that boys were only more motivated in terms of competition in reading. It is as well partially in accordance with Monteiro and Mata (2001) who obtained the same results with boys gaining higher motivation only in reading competition.

The possible explanation for the overall differing outcomes of our study with regard to boys gaining higher motivational scores could be due to the multisensory and funny characteristics of Jolly phonics method. The stories, songs, and actions in this method are very child-friendly and have originally been devised in line with the preferences and favourites of 3-6 year old native children in the first place. Thus, the younger the learners, the more they will enjoy the funny techniques introduced in Jolly Phonics. The participants of our study were 10-12 year olds (fourth, fifth and sixth graders of primary school) with the mean age of eleven. Whereas, girls usually reach the puberty at the age of 11, boys commonly enter puberty at least at the age of 14. Accordingly, in the age of 10-12, boys still have the immature and child-like characteristics of a child or a young person. Therefore, while boys of this age respond to the child-like actions and activities offered by Jolly phonics with more enthusiasm, girls may tend to see these actions as childish and not appropriate for their age, and hence be less motivated to connect with the method. Another interesting point which is worth mentioning here is that although Gambrell et al. (1996), Baker and Wigfield (1999), Hornery et al. (2008) and many other have identified a direct link between children's motivation for reading and their reading achievements, while the male learners in our study were shown to have higher motivation for reading they didn't perform any better on the reading tests than the female learners who were less motivated for reading. In other words, no relationship was observed between the boys' reading motivation and reading achievement in this study. The possible reason for this unexpected result may be due to the fact that when it comes to studying; girls are usually much more diligent and hard-working than boys. Therefore, it can be concluded that although the girls in our study had a lower reading motivation than boys, they were as successful as boys in the reading tests perhaps because they had tried harder to learn during the semester.

To sum up, the findings of the present study advocated that the synthetic multisensory method of Jolly Phonics contributed to higher reading and spelling abilities as well as reading motivation of students in early stages of learning English literacy. Undoubtedly, the reason for achieving these results is that the students in the control group were taught English literacy through the rote traditional phonics, which lacks any form of motivation for children as the knowledge acquired through rote learning cannot be easily applicable to new (unseen) words. However, the learners in the experimental group learnt literacy skills via Jolly Phonics which results in systematic literacy learning by presenting a synthetic multisensory child-centred approach for teaching the key skills for reading and writing. As Bowey (2006) pinpoints the synthetic phonics method employed in JP programme introduces the letter-sound correspondences in the most fruitful way which provides the children with the key to unlock the door. Learners will figure out the rules and do the rest by themselves. Jolly (2012) also advocates the multisensory approach adopted in Jolly Phonics stating that "young children learn particularly quickly when there is a physical activity involved. By doing an action for each letter sound, the children use movement, sight, hearing, and speech to help them remember. This multisensory approach is a very effective

way of teaching, as well as being fun for the children" (p. 7). Hence, it can be concluded that as it was referred to by Jolly (2012), the 'fun element' included in this method brought out a new interest in learning literacy for the young learners in this study. Ekpo et al. (2007) also stress that to achieve suitable literacy teaching, well prepared materials and fun games must be incorporated into the teaching programme. In JP programme, children learn better through play and fun carefully developed games, materials and activities.

5.5. Implications of the Study

The present study, though not completely free from its own limitations and shortcomings, implies a number of helpful hints to Iranian English literacy teaching practice. These will shortly be discussed in the following.

The results of this study may add to the inadequate body of research conducted on EFL young learners' literacy attainments. Likewise, the findings could fill the gap in the research studies carried out on young learners' motivational profiles in the EFL context specifically in the domain of literacy learning. Given the difficulties and complexities of learning to read and write in English which are mostly the outcome of the opaque orthography of this language, the findings might be helpful for all young beginners of English who have turned desperate by the dull and rote phonics methods for learning literacy skills and are therefore looking for ways to overcome the difficulties they encounter in forming and writing letters and blending the sounds together to read and write new words, especially the tricky words which have irregular spellings. Furthermore, the results may be useful for the teachers and even parents of the young learners who are dealing with the first steps of learning literacy in English. The findings can also be beneficial for the language institutes and schools to enhance their students' satisfaction by offering a fun and motivating method for teaching English literacy skills to the children. Teacher trainers and curriculum, material and syllabus designers in both language institutes and government's Ministry of Education may also benefit from the results. Being aware of the key required skills for literacy learning (the most important of which are blending and segmenting) which are taught in Jolly Phonics and the fun and motivating characteristics offered by this method, the curriculum and syllabus designers would better abandon the traditional methods of teaching literacy which are mostly based on memorizations and forceful drills, and instead incorporate the intriguing synthetic multisensory Jolly Phonics programme into the curriculum of schools and language institutes.

All in all, this study provides evidence that the synthetic multisensory method of Jolly Phonics programme can be successfully implemented in EFL classrooms for teaching literacy to young beginners and is at least effective in the earliest stages of literacy learning regardless of the fact that the permanence of its effects needs to be further investigated.

5.6. Limitations of the Study and Suggestions for Further Research

Like many other studies conducted in this area, the present one has suffered from a number of limitations which might jeopardize the generalizability of its findings. One of the limitations of this study was the short period of time that we had for running the treatment. It takes at least about a school year (approximately 9 months) for the Jolly Phonics programme to reveal its beneficial effects on literacy skills of students (S. Darby, personal communication, May 15, 2014). But due to the time limitations that we had, we were constrained to measure the reading and spelling attainments of the students as well as their reading motivation only on word level. Therefore, further research in the form of longitudinal studies is required in order to assess the young learners' literacy improvements and reading motivation over a longer period of time and on sentential and textual levels as well as on reading comprehension. In addition, since this study was implemented in a small language institute, it was to some extent narrowed down in terms of the number of participants. Consequently, further research could take place with the inclusion of a larger number of participants within several larger schools or language institutes.

Furthermore, the participants of our study were 10-12 year-old students. Thus, the findings cannot be generalized to learners of younger age groups. Subsequently, replicating the study with a group of younger age group can be suggested.

In addition to that, in this study the motivational profiles of students were evaluated solely with regard to the reading skills. Hence, there is a need for further research studies to investigate into the effect of synthetic multisensory phonics on other language skills such as writing or the attitudes and motivation of children towards learning English in general.

Moreover, to estimate the reading motivation of students, we used a 4-point Likert scale questionnaire and we made use of the cartoon character "Sponge Bob" as its choices for visually attracting and sustaining children's involvement in the process of research. But, there still remains the need for devising alternative assessment techniques such as open-ended questionnaires similar to Nagy's study (2009) in which more participatory techniques can be engaged. Similarly, due to the time limitations, this study was run only within a month and as a result the children's mastery of reading and writing words especially with regard to the tricky words was not trusted to an extent that the researcher could make use of standardized tests and therefore the researcher-made tests for assessing reading and spelling abilities of the participants remained to be the only option. Hence, replicating a similar study but with utilizing standard tests such as the Burt Reading Test (1974) and Schonell spelling test (1952) could be regarded as a possible suggestion for further research.

Besides, in this study only the motivation and attitudes of students were assessed. Other studies can take the teachers' and even policy makers' attitudes into account as well.

Last but not least, as for the control group, the rote traditional phonics was adopted to teach English literacy. Since comparing Jolly phonics with other phonics method such as analytic phonics may lead to different results, further research can apply other phonics methods to be compared with the effect of synthetic multisensory phonics on children's literacy and motivation.

5.7. Summary

In this chapter, the researcher restated the problem under focus and provided a brief summary of the findings arrived at in chapter four. After that, efforts were made to discuss the potential reasons for the obtained results and compare the findings of this study with others'. Further, a discussion of applications and pedagogical implications of the study was provided. Lastly, the researcher presented the limitations of the present study as well as suggestions for further research.

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Appendices

Appendix 1.

Appendix 2. Alternative vowel spellings

Vowel Sound	Vowel Spellings	Examples in Words
Long a	**ai** a_e ay	rain, waist, drain date, plate, flame day, stay, play
Long e	**ee** e_e ea	seed, bleed, street these, theme, seat, cream, read
Long i	**ie** i_e y igh	pie, tie, lie pipe, line, shine my, fly, cry night, fight, bright
Long o	**oa** o_e ow	boat, float, goat bone, close, smoke snow, slow, pillow
Long u	**ue** u_e ew	value, argue, cue cube, fuse, mule few, pew
Little oo	**oo** u	book, foot, shook put, push, pudding
Long oo	**oo** ue ew u_e	moon, fool, shoot glue, blue, true blew, flew, brew rude, flute, rule
/er/	**er** ir ur	supper, sister, blister bird, shirt, third turn, burn, purse
/or/	**or** au aw al	fork, port, storm fault, pause, taunt claw, saw, shawl talk, walk, chalk
/oi/	**oi** oy	oil, coin, spoil boy, toy, enjoy
/ou/	**ou** ow	loud, mouse, cloud cow, clown, brown

Appendix 3. Initial and final consonant blends

Initial consonant blends:

bl-, cl-, fl-, pl-, sl-, br-, cr-, dr-, fr-, gr-, pr-, tr-, st-, sc-, sm-, sw-, sn-, tw-, shr-, thr-, scr-, spr-, str-.

Final consonant blends:

-lb, -ld, -lf, -lk, -lm, -ln, -lp, -lt, -ct, -ft, -nt, -pt, -xt, -st, -mp, -nd, -sk, -sp, -ts, -ps, -ks, -ct, -nts, -mps.

Appendix 4. Certificates of participation in Jolly Phonics training workshop


Jolly Phonics
UK
Follow us on Twitter at jollylearning
Certificate of Participation
Zahra Ferasatpoor
has attended the
Jolly Phonics Training Workshop
Certified by: S. Darby
Susan Darby
Date: 12th August 2014
www.jollylearning.co.uk

Appendix 5. Jolly Phonics professional trainer certificate

Appendix 6. The inclusion of researcher as a trainer on the Jolly learning website: www.jollylearning.co.uk/regions/iran/jolly-training/

Jolly Learning Training in Iran

Trainers

Susan Darby

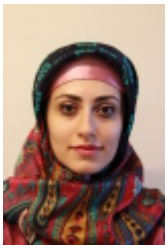
Susan Darby is a British teacher who first introduced Jolly Phonics to Iran in 1995, at an International Kindergarten, where she worked as Educational Manageress and Pre-School teacher, and achieved outstanding results in literacy. Over the years she has installed Jolly Phonics in numerous educational establishments and has recently opened up a Jolly Phonics Centre for children in Tehran. She is available to run individual or group workshops for teachers from Kindergartens, Schools and Institutes.

email:suelab2012@yahoo.co.uk

tel:Susan Darby: 0912 2375565 (English speakers)

mobile:Fereshteh Jagerani: 0936 7714676 (Farsi speakers)

Leila Farokhbakht



Leila, based in Iran, has seen the amazing impact that Jolly Phonics has had on improving her students' literacy skills. The level of joy, interest and motivation shown by her students has overwhelmed her. Leila genuinely wants to introduce Jolly Phonics to other teachers and make them aware of the amazing influence that the programme can bring to their teaching. She believes that every single child deserves to benefit from the best kind of teaching. Leila is currently completing research into the effect of using multisensory-based phonics on EFL young learners' English literacy and motivation.

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travel:Iran

Appendix 7. Word reading test

1. Pat
2. verb
3. gift
4. jug
5. look
6. mix
7. desk
8. lost
9. spin
10. cool
11. wait
12. boat
13. three
14. morning
15. shout
16. chips
17. brother
18. dark
19. quiz
20. cake
21. howf
22. leaf
23. yell
24. bike
25. joke

Appendix 8.

Appendix 9.

چكيده

پژوهش حاضر به منظور بررسي تاثير استفاده از روش صداشناسي تركيبي چندحسي (روش جولي فونيكس) در تدريس خواندن و نوشتن انگليسي بر سوادآموزي كودكان زبان آموز ايراني و انگيزه‌ي اوليه آن‌ها نسبت به مهارت‌هاي خواندن در زبان انگليسي انجام شده است. همچنين اين تحقيق در تلاش بوده تا بفهمد آيا اين روش تاثير متفاوتي بر يادگيري سوادآموزي و انگيزه‌ي اوليه‌ي دختران در مقايسه با پسران زبان آموز نسبت به مهارت‌هاي خواندن دارد يا خير. به اين منظور صد نفر زبان آموز كودک 10 تا 12ساله (50دختر و 50پسر) كه هيچ دانشي از زبان انگليسي نداشتند در اين پژوهش شركت داشته داده شدند. از بين 50 زبان‌آموز پسر شركت كننده در اين تحقيق، 25 نفر آن‌ها به طور تصادفي به گروه تجربي (گروهي كه به عنوان مداخله روش جولي فونيكس را دريافت كردند) و 25نفر ديگر به گروه شاهد منتصب شدند. به همين شكل، از ميان 50 دختر شركت كننده در اين پژوهش، 25 نفر به طور تصادفي براي شركت در گروه تجربي و 25 نفر ديگر براي گروه شاهد انتخاب شدند. در حالي كه زبان آموزان كودک در گروه شاهد براي كسب مهارت هاي ابتدايي سوادآموزي از طريق روش صداشناسي سنتي و حفظي آموزش مي‌ديدند، زبان آموزان گروه تجربي مهارت هاي سواد آموزي يا به عبارت ديگر حروف و صداهاي انگليسي و خواندن و نوشتن كلمات انگليسي را از طريق روش صداشناسي تركيبي و چندحسي جولي فونيكس فرا مي‌گرفتند. پس از يک دوره‌ي آموزشي يكماهه‌ي زبان انگليسي، همه‌ي شركت كنندگان اين تحقيق در يک آزمون مهارت خواندن و يک امتحان ديكته شركت كردند. همچنين يک پرسشنامه‌ي 4 گزينه‌اي به منظور سنجش انگيزه‌ي اوليه‌ي خواندن به تمامي شركت كنندگان داده شد. براي تحليل داده هاي به دست آمده از نمرات زبان آموزان در آزمون‌هاي خواندن، ديكته و پرسشنامه‌ي انگيزه، از يک سري آمار توصيفي و استنباطي استفاده شد. نتايج نشان داد كه گروه تجربي (گروه جولي فونيكس) در مقايسه با گروه شاهد در آزمون‌هاي خواندن و ديكته عملكرد بهتري داشتند، همچنين انگيزه‌ي بالاتري نسبت به مهارت‌هاي اوليه‌ي خواندن در زبان انگليسي نشان دادند. به علاوه، از نتايج اين پژوهش مشخص شد كه روش جولي فونيكس تاثير معناداري بر تفاوت جنسيتي در يادگيري سوادآموزي ندارد، اما بر انگيزه‌ي خواندن پسران نسبت به دختران بيشتر تاثير مثبت گذاشته است.

كليدواژه ها: صداشناسي، رويكرد چندحسي، صداشناسي تركيبي، روش جولي فونيكس، سوادآموزي، كودكان زبان آموز، انگيزه ي خواندن

دانشگاه اصفهان

دانشکده زبان‌های خارجی

گروه زبان انگلیسی

پایان نامه کارشناسي ارشد رشته آموزش زبان انگلیسی

تاثیراستفاده از صداشناسی انگلیسی از طریق شیوه ی ترکیبی چندحسی بر یادگیری سوادآموزی و انگیزه نسبت به مهارت های خواندن در زبان انگلیسی: مطالعه ی موردی کودکان زبان آموز ایرانی

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