GENERAL DISCUSSION
CHAPTER IV

GENERAL DISCUSSION

5.1 Organization of the Chapter

This chapter will start with an overview of the previous chapters. Then, the main findings of Chapter three will be discussed. The chapter will move to implications of the study, limitations of the study, suggestions for the further research, and recommendations. It will close with a brief summary of the chapter.

5.2 Overview of the Previous Chapters

The objectives of the study were to analyse the vocabulary knowledge of normal students and students with dyslexia who are Second Language Learners of English. To examine the above objective, data was obtained on tests designed with synonyms and antonym words for familiarity of words and word choices, accuracy of lexical judgement (AC) and reaction time for lexical judgement (RT) to study how students respond to the stimuli within milliseconds. By using the test material through questionnaire and DMDX software, the present study was carried out.

The study was carried out in a city that is fairly representative of an ESL environment. Stratified sampling technique was followed for selection of normal students and students with dyslexia. The participants were ESL learners with Kannada as their native language. 214 (180 normal students and 34 students with dyslexia) were selected from three different schools from south zone, Mysuru city, Karnataka, India. All the participants had exposure to English as one of the subjects in the school, were from 6th to 9th Grade. The sample included all the three SES (L, M, & H) and two genders (M & F). NIMH Socio Economic Status scale (Venkatesan, 2011), Early Reading Skill (ERS, Rae and Potter, 1981) questionnaire and DMDX software were employed as instruments along with specific tests developed using synonyms and antonyms for vocabulary assessment.

i) NIMH Socio Economic Status scale was developed and standardized by Venkatesan (2011). It was used to divide the participants into low, middle and high SES levels.
ii) The Early Reading Skills by Rae and Potter (1981) has 8 tests. The auditory discrimination test examines the subtle differences in listening and perception; tests for phoneme-grapheme correspondence to identify the initial consonants and final consonants in a given word; test to evaluate if participant can say the initial consonants and two letters that blends at the beginning of words from dictated words; the structural analysis test examines knowledge of both affixes and root words as an aid to pronunciation and analysis of meaning; the oral reading test examines decoding skills and the speed of reading, skill in phrasing, recognition of punctuation and tone; the questions on the passage examines reading comprehension of the material read by the participant.

iii) The questionnaire developed for the purpose of the study assesses students knowledge on synonyms and antonyms at three levels – easy level, average level and difficult level and was based on three multiple choice containing a target word. The participant is required to choose a target word out of the three choices given. Also through this questionnaire participant’s familiarity rating on words and choices was assessed. The basic idea of this test is to measure progressive stages of vocabulary knowledge.

iv) The DMDX software is a windows display program with millisecond accuracy given by Foster & Forster (2003) was used to measure accuracy and Reaction Time for lexical judgement.

The data was collected using questionnaire and DMDX software and subjected to statistical analyses. The results of the study are presented in Chapter three for each test and w.r.t. the variables (SES and Grade) for the two groups of participants (Normal students-NS and students with dyslexia-DS). Four independent variables (Socioeconomic status-Low, Middle, High; Grade - 6th to 7th, 7th to 8th; and 8th to 9th; Gender - Male and Female; and Group- Normal students and students with Dyslexia) were considered for analyses of scores on the six tests SE, SA, SD, AE, AA and AD.

General discussion will be presented keeping the hypotheses proposed for NS and DS groups. The results obtained through tests will be discussed w.r.t the three independent variables considered for the study-Group, SES and Grade.
5.3 General Discussion on Hypothesis one (NS & DS)

In this section, each hypothesis will be discussed based on the results obtained from the participants.

**H0.1:** There is no significant difference in vocabulary performance of ESL NS and DS on questionnaire in the subtests (SE, SA, SD, AE, AA, AD) with reference to groups, SES, grade.

The objective of the study was to examine the score on the six tasks/tests (SE, SA, SD, AE, AA, AD) on the three variables/factors Groups (NS & DS), SES (low, middle, high) and Grade of (6-7, 7-8, 8-9) on Kannada speaking ESL students. This hypotheses study was examined for Groups (NS & DS) Questionnaire based test for vocabulary assessment and software based test for lexical (word) judgement.

5.3.1 Vocabulary knowledge vis-a-vis Groups of NS & DS

In support of hypothesis 1, the results of this study on Groups indicated significant difference for all the lexical categories tests between NS and DS. To perform vocabulary tasks, there is a need to access stored vocabulary in the mental lexicon which NS group learn to process either for retrieval of words or for comprehending a word that is aided with memory for words stored in long-term memory. Whereas, the DS group showed a breakdown of the elements during lexical processing. The results indicate that the DS group carried out the tests with great difficulty, which corroborates with the studies that claim that students with dyslexia do not show good performance in processing, understanding and decode/decide, due to their weak vocabulary knowledge. The results are in agreement with Callens, Tops, and Brysbaert (2012) who reported children with dyslexia often have very less vocabulary knowledge stored in their mental lexicon. Also according to the literature, students with dyslexia have difficulties in decoding ability (Silver, Ruff, Iverson, Barth, Broshek, Bush, et al. 2008) and (Wu, Huan, Meng, 2008) that interferes with mechanism of mental representation and/or the transference of information to the long-term memory (Bowey, 2000; Juel, 1988; Shankweiler and Liberman, 1972; Shankweiler et al., 1999).

The present study indicates that low scores among the DS were mainly caused by the insufficient words list which leads to the poorer performance also due to weak socioeconomic status and lower grade where mostly DS are vulnerable to poor development of vocabulary. These results are in agreement with the previous studies.
by Connelly, Campbell, MacLean and Barnes (2006) who state that DS often have smaller vocabularies, are more limited in their choice of words. Caroll and Iles (2006) report that DS often exhibit slow or inaccurate reading and show difficulties concentrating on a task for a long time (Mortimore and Crozier, 2006).

It was observed that the DS often guessed the spelling of words which is supporting the findings of Schoot, Licht, Horsley and Sergeant (2000). They report that guessing while reading is not uncommon for dyslexics. On the contrary, the NS performed on the complex tasks faster facilitated by their superior lexical processing and the ability to encode the information or words in long term memory compared to the DS. Comparison of scores of DS and NS on synonyms difficult task and antonym difficult task suggest that the scores of NS showing an upward trend with Grade. The NS are able to do better in average and difficult task of synonyms and antonyms whereas the DS found it hard to complete the tasks.

5.3.2 Vocabulary knowledge vis-a-vis Socioeconomic Status of NS & DS

In support of hypothesis 1, the results of this study on SES indicated significant difference for all the lexical categories tests between NS and DS. In support of hypothesis 1, the LSES of both NS and DS Groups showed poor performance on vocabulary tests compared to M SES and H SES. The findings of the present study are consistent with other studies (Blair et al., 2011; Noble et al., 2006, 2007; Piccolo et al., 2012) that report poor performance on cognitive tasks (vocabulary being one of the tasks) by L SES at different age/grade ranges, especially in younger aged children.

The socioeconomic status plays a major role in each and every student’s life as this starts from the beginner level of schooling to the end of high school. Since vocabulary development depends upon the cognitive development, study atmosphere, the time, care and support given by parents (Forns et al. 2012; Piccolo et al. 2012), the impact of L SES is an important aspect of concern. According to Lupien et al. (2001) stated that SES differences in a child could be due to the school environments and also to the neighbourhood environments in which children are exposed as a function of SES.

5.3.3 Vocabulary knowledge vis-a-vis Grade of NS & DS
In support of hypothesis 1, the results of this study on Grade observed significant difference for all the lexical categories tests between NS and DS. The research study also demonstrated significant differences between grades in each tasks/tests by NS and DS indicating influence of Grade. While the NS showed a steady increase in scores of the tasks, the DS group did not show a consistent progression. However, univariate ANOVA showed minimal association between grades and dyslexia for each task on DS compared to NS. The DS from 6th – 7th grade scored less compared to the 8th – 9th grade and did not show significant difference compared to the NS. The minimal association between grade and DS could be explained on the basis of lower prevalence of dyslexia in lower grade (by virtue of learning load being very light). However, majority of DS are likely to manifest symptoms of dyslexia only in higher grade (due to increase in learning load). The NS are able to do better in average and difficult task of synonyms and antonyms whereas the DS found it hard to complete the tasks. In order to explore the exact nature of the association between grade and prevalence, further studies should be conducted in the near future.

5.3.4 Qualitative analysis of performance of NS & DS

On personal interview with 12 DS, their English teachers and parents, it was observed that the ESL students’ education level of the mother in school assignments, learning habits, motivation were also contributing to the poor scores. Also according to the English teachers, the second language is influenced by mother tongue, where most of the children expect the teacher to speak in native language thus denying the opportunity for exposure to English.

Maternal characteristics such as verbal ability and personality have been shown to be related to the construction of the child’s environment, therefore, influence the child’s development. In the previous studies, the conclusion that maternal education being strongly associated with reading and literacy had been reported, which was confirmed by the results of current study (Aaron Johnston et al. 2005; Behrman, 1997; Emily Beller, 2009; Korupp et al. 2002). Finally learning habits and motivation were also potential factors for NS and DS which were seldom reported in previous studies (Sideridis; Morgan; Botsas; Padeliadu; Fuchs, 2006). Motivation is important for learning because of its link to

Reading experience is the vital access to increase vocabularies, improve readability, understandability of words, their meanings and related skills. For normal students vocabulary learning and scheduled learning time takes place without the need of motivation also without hesitation they are active in asking question, discussing with classmates or teachers whereas for dyslexic students, the English teachers suggested that learning habits for English subject should be influenced by motivation. If not, these children are generally unhappy, depressed, show bored feelings to any type of learning or academic activities if the activities are not to their likings.

5.4 General discussion on hypothesis 2 (NS)

**H0.2:** There is no significant difference in the vocabulary performance of ESL normal students using questionnaire and DMDX in the subtests (SE, SA, SD, AE, AA, AD) with reference to SES and grade.

The objective of the present study was to discuss the vocabulary performance on six tests (SE, SA, SD, AE, AA, AD) between the two variables/factors SES (low, middle, high) and Grade of (6-7, 7-8, 8-9) on Kannada – ESL normal students.

In order to examine the above hypotheses study obtained data on normal students through two instruments:

1. Questionnaire based test.
   a. Normal Scores on tests by NS
   b. Familiarity Score on word and choice (FS) by NS

2. Lexical judgement task using DMDX software.
   a. Accuracy (AC)
   b. Reaction Time (RT)

The first sub-hypotheses was analyzed through questionnaire based test material to investigate the performance on vocabulary and the familiarity score on words and choices on each task/test and the second test for accuracy and the reaction time for lexical judgement through DMDX software.
5.4.1 Vocabulary knowledge vis-a-vis SES (NS)

The study of vocabulary knowledge on socioeconomic status revealed a significant difference on all the sub-hypothesis namely scores of NS. These results are supported by many previous studies on normal students such as Khan (1991) who conducted studies on socioeconomic status and academic performance on vocabulary knowledge (Chopra, 1964, 1968; Frempong, 2000; White, 1982).

In support of hypothesis 2, the results of this study on socioeconomic status observed significant difference for all the lexical categories tests on NS. The scores obtained by NS on each of six tests of synonyms and antonyms by all the participants from three levels of socioeconomic status (L,M,H) suggested that the scores of High SES students were better when compared to L SES students. In light of this result, it can be said that students of High SES & Middle socioeconomic status have better vocabulary knowledge than students of Low socioeconomic status, since there was not much significant difference found between (Middle and High) socioeconomic status categories. This is in line with the earlier research studies, which have repeatedly found that SES affects all aspects of student performance (Baharudin & Luster, 1998; Eamon, 2005; Hochschild, 2003; Jeynes, 2002; Majoribanks, 1996; McNeal, 2001; Seyfried, 1998). The figures depict an increase in the mean score from low SES to middle SES to high SES. The fact was that the gap between low SES and high SES shows significant difference on the scores of the students. Menon (1973) stated the difference between the HSES and LSES students. He had concluded that students from HSES perform better than the LSES students in vocabulary tests. Secondly, the related tables also revealed that the HSES students scores has the highest mean score in synonym easy level test for NS. This finding differs from what was obtained by other researchers (Craig Ronald, 2000; Eze, 2002; Hill et al., 2004; Rothstein, 2004) who had asserted that status of parents does not only affect the performance of students but also makes it impossible for children from low socio-economic background to compete well with their counterpart from high socio-economic background under the same academic environment.

Although this present research setting is in urban area, there is very marginal difference between the LSES and MSES as most of the parents are from illiterate and less educated background. Secondly, it could be that the parents that were with low socio-economic background are illiterate and semi-illiterate, might be enlightened about the needed success of their children education in which case, they assist and
encourage their children to be adequately involved in their academic activities and hence provide them with basic needs that might enhance their performance. This is in accord with the research findings, the mean scores of students from low socio-economic status and high status are still relatively different (see Tables II and III) also in line with (Eamon, 2005; Saifi, 2011; Suleman et al., 2012). Findings also showed that the lack of performance is due to the individual gaining access to sources and resources of learning.

In support of hypothesis 2, the main effect for within subject result and between subjects for the factor conditions with SES on the familiarity of words, non familiarity of words, familiarity of choices and non familiarity of choices has most significant difference observed on all of the six tests. The difference was also seen in the familiarity rating on words and choices. That is H SES students were familiar with almost all the words and choices given in the six tests also their performance score was higher in all aspects of the tests. The mean score in synonym easy level test and the familiarity score of words and choices of NS of H SES category were highest. Unfortunately, there is little information available on the number of unfamiliar words students find in a passage or in a given material. However, additional analyses of data reported in part in Anderson and Freebody (1983) indicate that even with relatively little reading (500,000 words a year, or less than 3,000 words per school day), an average student in fifth grade would encounter almost 10,000 different words a year which he or she did not know, even by lenient criterion of word knowledge. For a student with a smaller-than-average vocabulary, the number of unfamiliar words would be even higher.

The performance of students is better when unfamiliar words of synonyms are repeated frequently and the words are strong in their long term memory states (Camine et al., 1984; Jenkins et al., 1984; Stahl & Fairbanks, 1986). The LSES students who posses low vocabulary had much difficulty to understand the meaning of words that presents new ideas.

To help out these problems for English as Second Language learners’, Nation (1994) recommends vocabulary teaching strategies which are to supply the materials or text to the students that comprise of unfamiliar or unknown words, interesting activities for set of students that helps to find the definition, activities that help them to understand the parts of speech, activities to guess the meaning of words in a
passage or in text and activities that helps in remembering the words by using them in different contexts.

In support of hypothesis 2, the result for the factor SES showed significant difference on all of the six tests in the accuracy (AC) and reaction time (RT) of lexical judgement. In our study for accuracy score the difference was observed on average word level than easy and difficult word level, and for reaction time students performed better in easy word level than in average and difficult word level. Weaker vocabulary scores were associated with slower RTs in the given task. This finding is consistent with findings of several earlier studies (Brysbaert et al., 2016a; Diependaele et al., 2013; Unsworth et al., 2011; Yap et al., 2012). In short the accuracy and the speed of performance were associated with the vocabulary size, the larger vocabulary being associated with better performance in the task.

5.4.2 Vocabulary knowledge vis-a-vis- Grade (NS)

The present study explored differences between age groups on NS. In particular, it examined how vocabulary knowledge and other subject and text variables are related to individual variability in learning from context. In support of hypothesis 2, the results of this study on Grade observed significant difference for all the lexical categories tests on NS. Its major hypothesis was that, in natural text, students with lower levels of poor vocabulary experience difficulty in learning word meanings at least partly because they know words less well, encounter more unknown words, and hence have less contextual information available to them. Thus, this research was to analyze the differences in students' vocabulary knowledge and the cause for the variation and some guide to the development of intervention programs for lower-achieving students.

Previous studies had brought immense results and the results had shown that lexicon or lexical properties are very essential when a student or children are dealing with words. For example words similar in meaning are handled very well by language learners Jared & Kroll, (2001). Additional factors that affect lexical processing include the familiarity of the words, the grade or the age at which they are acquired, their degree of absoluteness, and their length states (Morrison & Ellis, 2000; Zevin & Seidenberg, 2002, 2004).

The scores obtained by NS were analyzed for each of six tests of synonyms and antonyms on the three grade levels, the scores of 8th-9th students was better when
compared to the 6th-7th students. There was an increase in the mean score from 6th-7th to 7th-8th to 8th-9th grade level. The gap between 6th-7th and 8th-9th shows significant difference that was also seen in the familiarity rating on words and choices. The overall trend was that there was significant difference on the SES and the performance improved with increase in grade starting from primary school and continuing to middle school. The performance of the students grade level may fluctuate depends upon the effect of social and financial conditions states Duncan, Brooks-Gunn, & Klebenov (1994); Lerner, (1991) also reported on the effect of grade or age on the association of socioeconomic status and performance in school are interrelated. Another study revealed that when students become aged they are experienced with various words from one grade level to another grade level the association between SES and the school performance almost declines and there would be no trace left expresses Coleman et al.’s (1966) and White’s (1982). The researcher White explains with two likely reasons on how these effects fades out when students become older. The first reason he provides states that is of schooling, when a school provides equilibrium the exposure for the average SES students is balanced and also when students stays for schooling process for extended time making use of the facilities like library, extra coaching on English skills etc., the effect of the SES on these students will fade out in due course of time and there would be a progress in the performance of the students. The second reason he provides, huge number of LSES students who are doing poorly in elementary school because of their family SES are more likely to dropouts of the school.

This findings are contradictory to other researchers Duncan et al., (1994); Walker, Greenwood, Hart, & Carta, (1994) showed the results from analysing the students on long term basis, the gap remains the same in older students beween the LSES and HSES in-spite of all necessity supports given and also possibility to widen states Pungello, Kupersmidt, Burchinal, & Patterson, (1996). With grade as a factor significant difference in lexical performance of familiar word, non familiar word, familiar choice and non familiar choice in normal students was evident in the study.

In support of hypothesis 2, the main effect for within subject result and between subjects for the factor Grade, grade with conditions on the familiarity of words, non familiarity of words, familiarity of choices and non familiarity of choices has most significant difference observed on all of the six tests. That is 8th-9th students was familiar with almost all the words and choices given in the six tests.
also their performance score was higher in all aspects of the tests also these students’ vocabulary knowledge is high compared to the other two grade levels. This in line with the Zeno et al., (1995) where he states two possible statements in his study on 3rd and 5th grade students. First, the words selected for this study were included in the 1000 common regular words and extensively used words in 3rd through 6th grades, when analyzed the results brought to the conclusion that in set of words 3rd graders are less likely to know than are 5th graders. Furthermore, 5th graders may have been more likely to know the multiple meanings for a word than 3rd graders. Also Nation (2001) states there is evidence that students develop an ever more complete understanding of words over time. Secondly another researcher Meyerson, Ford, & Jones (1991) states, the reason for the 5th grader to score better was that they encounter more multiple meaning of words not content area specific, have better lexicon whereas for the 3rd grade students the lexicons taught are content are specific which they are reading in the academic textbooks and they encounter very less number of words.

Accuracy and speed of processing or RT measures have also been widely used in researching language processing on English language tasks states De Bruijn, Dijkstra, Chwilla, & Schriefers, 2001; Kotz, 2001; Li, 1994; Weber & Indefrey, 2008). In support of hypothesis 2, the main effect result for the factor Grade has most significant difference observed on all of the six tests in the accuracy (AC) and reaction time (RT) of lexical judgement. In our study the accuracy score (AC) of three levels of Grades on normal students had significant difference on lexical performance, the students scored better in average word level than in easy word level and difficult word level. Also for the reaction time (RT) score of three levels of Grades of normal students had significant difference on lexical performance, the students’ reaction time was better in easy word level than in average word level and difficult word level which shows a normal trend.

5.4.3 Qualitative analysis of performance of NS

While test was administered the unknown or less known words for lower SES and lower grade students just skipped and seem not interested in the English language and this shows the less awareness about language to the children. On the other hand the higher SES and higher grade ESL’s did better without any hesitations. There was a necessity for new meanings to be taught for all levels of SES for each grade also in
class administration there was no proper interaction between the affected students and teachers being aware neglect the need of those children due to various other reasons but this could be handled and minimised when the instructor or teacher makes the students to get involved with lively interactions with the students and also with student’s centered teaching states (Adams, 2008; Huba & Freed 2000; Peyton, et al. 2010).

Another point to view was that the ESL learners’ when encountering a new word in a context or material they go for guessing of the meaning, and this “inferencing or guessing” was considered the most frequent and helpful strategy by many researchers. The researchers Oxford and Scarcella (1994) seem to agree by pointing out that guessing from context is considered the most useful strategy.

5.5 General discussion on hypothesis three (GNS)

**H0.3:** There is no significant difference in the vocabulary performance of ESL normal students using questionnaire and DMDX between gender in the subtests (SE, SA, SD, AE, AA, AD) with reference to SES and grade.

The objective of the present study was to examine the score of the six tasks/tests(SE, SA, SD, AE, AA, AD) on the three variables/factors SES (low, middle, high), Grade of (6-7, 7-8, 8-9), Gender (male and female ) on Kannada – ESL normal students.

The hypotheses study was analysed for normal students score through 2 test materials,

1. Questionnaire based test.
   a. Normal Scores on tests by NS
   b. Familiarity Score on word and choice (FS)

2. DMDX software.
   a. Accuracy (AC)
   b. Reaction Time (RT)

The first sub-hypotheses had analyzed through questionnaire based test material to investigate the normal performance score and the familiarity score on words and choices on each task/test and the second test has investigated the accuracy and the reaction time of the score through DMDX software. These four analyses have hypothesized separately for each task to investigate the vocabulary performance score on each level and factors.
5.5.1 Vocabulary knowledge vis-a-vis Socioeconomic Status (GNS)

In support of hypothesis 3, the main effect result for the factor SES has most significant difference observed on all of the six tests. The study on vocabulary knowledge of male and female socioeconomic status students had revealed a significant difference on all the sub-hypothesis scores of the students. w.r.t. NS score analyzed on each of six tests of synonyms and antonyms on the three levels of socioeconomic status (L,M,H), the scores obtained by male and female High SES students was better when compared to the male and female of Low SES students as HSES students are provided with all the necessary facilities regarding their children education.

As the Table- depicts male students showed better performance than female students. This may be due to the fact that this group of male adolescents are more focused and pay more attention to secure good marks and hence work hard more as compared to their female counterparts. (Awofala, 2011; Doris et al. 2012; Jovanovic et al., 1994; Maliki et al., 2009; Oluwagbohunmi, 2014; Udida et al., 2012) disclosed that male students performed better than females and the results were statistically significant. This result is in line with previous studies by Kaur (1971) who conducted a study on IX in Patiala city and observed a highly significant correction between socio-economic status & performance score of higher secondary school on male gender. Also in line with other result by many previous studies such as (Chopra, 1969 & 1982; Frempong, 2000; Khan, 1991; Rothman’s, 2003; Srivastava 1974; White, 1982) this point of view is strongly supported as they reported Socio economic status to be strong predictor in the success of girls. They found that girls belonging to low socio economic status are generally busy in their household work with her mother in very early stage of their life and they don’t have much time and facilities which require for scoring good academic score.

In support of hypothesis 3 for the familiarity of word and non-familiarity of words, the main effect for within subject result for the factor condition with SES and on between factor has most significant difference on all of the six tests. The main effect results for the familiarity of choice and non-familiarity of choices, the main effect for within subject result for the factor condition with SES, two way interaction conditions with SES, Grade and on between factor has most significant difference on all of the six tests. The difference was also seen in the familiarity rating on words and choices. There was significant difference in gender
for lexical performance of familiar word, non familiar word, familiar choice and non familiar choice on the three levels of SES, also in Antonym difficult word level of LSES and M SES shows a difference as either one of the SES scores high or there is a least difference. This is mainly because of guessing of words which are given in the materials either of one SES scores on gender varies and less research are carried out on this area. Hence, would suggest more research to be focussed on the knowledge of male and female students’ guessing skills, depth and breadth of the vocabulary on ESL learners’.

Lastly with accuracy (AC) and reaction time (RT), In support of hypothesis 3, the main effect result for the factor SES has most significant difference observed on all of the six tests in the accuracy(AC) and reaction time (RT) of lexical judgement. In our study for accuracy score both the male and female students performed better in average word level than easy and difficult word level, and for reaction time students performed better in easy word level than in average and difficult word level, weaker vocabulary scores were associated with slower RTs. This is in line with Scarcella and Zimmerman (1998) found that male gender performed significantly better than female gender in all the tests in understanding, and use. In Edelenbos and Vinjé, 2000; Lin and Wu, 2003; Lynn et al. 2005), and males also outperformed females in vocabulary knowledge. Another study states Boyle (1987) boys are superior to girls in the comprehension of when vocabulary are heard.

In contrast to the significant difference on genders few researcher expresses there is no significant difference between boys and girls with regard to their performance states Subramanyam & Rao (2008). No gender based statistical significant differences were found by Abubakar and Adegboyega, 2012; Abdu-Raheem, 2012; Gupta et al. 2012; Josiah and Adejoke, 2014; Kangahi et al., 2012; Mlambo, 2011; Odeh, 2007).

5.4.2 Vocabulary knowledge vis-a-vis Grade (GNS)

In support of hypothesis 3, the main effect result for the factor Grade has most significant difference observed on all of the six tests. The current study analyzes the gender scores between the grades on normal students. The study examined on ESL learners’ how vocabulary knowledge affects each grade level on the three levels of tests (easy, average, difficult) and the difficulties faced by the male and female students.
Firstly, there was a significant difference in gender performance of three levels of Grades showing an increasing trend from lower grade to higher grade of normal students. And with respect to the male and female students score analyzed on three levels of six tests of synonyms and antonyms on the three grade levels, the scores obtained by male students were better when compared to the female students. These results are in line with Boyle (1987) expressed that; male students are normally better performers to female students to understand the vocabularies when they are heard than other skills. Also, similar results by Scarcella and Zimmerman (1998) showed that boys accomplished significantly better than girls in school test where they are familiar with vocabulary, understanding the meaning of the lexicons given in the materials or text and also to use in various context. The same are expressed by other researchers; Lin and Wu, 2003; Lynn et al., 2005; Edelenbos and Vinjé, 2000) as male gender outperformed female genders in vocabulary knowledge. We could also track the improvement as students go from a lower to an upper grade in the current research also better performance by male students. This is because schooling were neglected on female students, Malathi (1987) she reported a study on Harijans of villages of Karnataka reported that educational aspirations in case of girls were almost negligible causing very poor enrolment of girl children in schools.

The present study has offered a thorough research into receptive vocabulary size development determining that this is an increasing knowledge also there must be necessary strategies needed for lower grades. Learners know significantly more words as they go up grade. However, the increase is steady and it progresses in a linear way, with similar lexical gains throughout the years tested.

In support of hypothesis 3, for the familiarity of word and non-familiarity of words, the main effect for within subject result for two way interaction conditions with Grade, Gender and on between factor has most significant difference on all of the six tests. The main effect results for the familiarity of choice and non-familiarity of choices, the main effect for within subject result for two way interaction conditions with SES, Grade and on between factor has most significant difference on all of the six tests. Male students’ lexicon had better vocabulary words than the female gender students. This is because male students are provided with lots of sources like internet, mobile etc., as they move from one grade to another grade level. Lower grade level female students tend to guess lot of words but this could not be concluded as they have wider vocabulary words in their mental
lexicon. This is mainly because they don’t get additional support also parent’s neglect their studies, lack of motivational encourage the girl child for household chores or to be at home.

Lastly, the gender differences on three levels of grades were explored from the cognitive and social perspective (discussed above). Also this study runs counter to previous research which demonstrate sex differences in several areas of vocabulary acquisition (see Jiménez, 1992, 1997; Jiménez & Moreno, 2004; Jiménez & Ojeda, 2007, 2008, 2009; Meara & Fitzpatrick, 2000; Nyikos, 1990). Nonetheless, other studies on receptive vocabulary size concluded that there were no gender differences (Grace, 2000; Jiménez & Terrazas, 2005-2008).

In support of hypothesis 3, the main effect result for the factor Grade has most significant difference observed on all of the six tests in the accuracy (AC) and reaction time (RT) of lexical judgement. Accuracy score of three levels of Grades on gender had significant difference on lexical performance, the students scored better in average word level than in easy word level and difficult word level for 6th-7th, 7th-8th grades and speed of processing or RT score of three levels of Grades for gender had significant difference on lexical performance, the students’ reaction time was better in easy word level than in average word level and difficult word level. The results of our study support and expand previous results of Kamphus and Lozano (1984) have noted that in 6 to 11 year old children the “performance on different language tasks increased with age”.

Our findings on male and female students vocabulary knowledge and performance at various levels of grades have not only shown several pedagogical implications for the education of ESL students and the training of their teachers, but have also provided information of vital importance that may be taken into consideration by future researchers, educators for productive instruction to motivate and female children from the lower grade level. The differences between males and females on language in general are not new (Emanuelsson and Stevensson, 1990; Halpern, 1992), however, such differences analyzing on ESL learners on government school students on cognitive, sociologically and other factors issue that hinders the vocabulary knowledge are quite new. Finally it should be pointed out that the way is still endless for researchers to investigate language differences between male and female students.
5.6 Summary of General Discussion Chapter

The chapter four commenced with a brief review of the previous chapters. Then, the findings pertaining to each hypothesis were discussed in general with other research findings. The following chapter brings to the conclusion of the research study.
The objective of the research study was to examine the vocabulary knowledge of ESL children who are native speakers of Kannada. In order to address the above, NS and DS Group of students from Grades 6-7, 7-8, & 8-9 from three SES levels (H, M, & L) were recruited for the study. The participants were administered six vocabulary tests (AE, AA, AD & SE, SA SD) designed with lexicons chosen from synonyms and antonyms category at three difficulty levels (Easy, Average and Difficult) for simple lexical judgment, w.r.t familiarity and also to make word choices.

The results obtained on performance tests through questionnaire using synonyms and antonyms did not indicate significant difference in the scores on the six tests w.r.t SES and Grade. In view of the above findings, the above stimuli were used to design timed-tasks using DMDX software for lexical recognition of familiar and non-familiar words, choice of familiar and non-familiar words (pl. see Appendix for the list of stimuli). The results obtained by the NS group indicated significant difference when individual variables were considered for analysis (SES and Grade) but not when within-and between-groups were analyzed except for SE and SD stimuli.

The above findings can be interpreted as between antonyms and synonyms; antonyms are easier category for children to learn. In the synonym category, the easy and difficult levels did show significant difference between both Grade and SES with no significant difference for SD category. In light of the mean score being below average for SD, it may be said that this category of stimuli was equally difficult for all the SES and Grade levels and hence, there was no significant difference.

The results of the study suggest that timed tasks can be potential tasks to assess vocabulary knowledge of NS (DS not examined in the present study on timed tasks and hence, no remarks made) particularly tasks incorporating synonyms at different levels of difficulty. However, complexity of tasks and time set for task need to be carefully set if NS (as well as DS) need to be differentiated on vocabulary performance. The results offer take home message for teachers and professionals to facilitate varied categories of vocabulary in children at different complexity levels to augment academic achievement.