Chapter VI

Findings, Discussion, Implications, Recommendations and Conclusions
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FINDINGS, DISCUSSION, IMPLICATIONS,
RECOMMENDATIONS AND CONCLUSION

6.1 Introduction
This chapter deals with findings and its discussion, implications, recommendations, suggestions for further research and conclusion.

6.2 Findings of the study
The following are the findings that are obtained by testing the hypotheses quantitatively and by answering the research questions qualitatively:

1. Students at risk of dyslexia of Control group and Experimental group did not differ significantly in their reading performance in the pre-test. The students in the Control group and the Experimental group were found to have similar level of reading performance in English before the experimentation.

2. Post-test score of students at risk of dyslexia of Control group in their reading performance was not significantly greater than that of the pre-test. Hence the traditional method of teaching was not found effective in enhancing the reading performance of students at risk of dyslexia.

3. Post-test score of students at risk of dyslexia of Experimental group in their reading performance was significantly greater than that of the pre-test. Hence the multisensory strategic orientation was found effective in enhancing the reading performance of students at risk of dyslexia.

4. Students at risk of dyslexia of Control group and Experimental group differed significantly in their reading performance in the post-test. It was also found that there was a marked increase in reading performance of the Experimental group than that of the Control group.

5. The reading performance of the Students at risk of dyslexia in the Control group were found to differ significantly among the pre-test, post-test and delayed post-test. But it was found that there was no marked increase in their reading performance in the post-test and the delayed post-test from the pre-test which indicates that the conventional method of teaching was not found effective in alleviating reading difficulties of these students.
6. Students at risk of dyslexia of Control group did differ significantly in their reading performance in English in the delayed post-test and the post-test. There was a decrease in their reading performance in the delayed post-test than that of the post-test.

7. Students at risk of dyslexia of Control group did not differ significantly in their reading performance in English in the delayed post-test and the pre-test. There was no marked increase in their reading performance in the delayed post-test than that of the pre-test.

8. Students at risk of dyslexia in the Experimental group did differ significantly in their reading performance in English among the pre-test, post-test and delayed post-test. It was found that there was a marked increase in their reading performance in the post-test than that of the pre-test which indicates that the multisensory strategic orientation was found effective in developing reading performance of these students.

9. Students at risk of dyslexia in the Experimental group did differ significantly in their reading performance in English in the delayed post-test and post-test. There was a slight decrease in their reading performance in the delayed post-test than that of the post-test. Hence, it is inferred that these students need to be provided intervention for longer duration to alleviate their reading difficulties.

10. Students at risk of dyslexia of Experimental group did differ significantly in their reading performance in English in the delayed post-test and pre-test. There was a marked increase in their reading performance in the delayed post-test than that of the pre-test.

11. Experimental group and Control group did differ significantly in their reading performance in English in the delayed post-test. There was a marked increase in reading performance of the students in the Experimental group than that of the Control group in the delayed post-test.

12. Students at risk of dyslexia in the Control group did not differ significantly in their reading performance in English in the post-test with reference to gender. Hence, it is inferred that the boys and the girls were found to have similar level of reading performance in the post-test.

13. Students at risk of dyslexia in the Experimental group did not differ significantly in their reading performance in English in the post-test with
reference to gender. There was no marked difference between the boys and the girls in their reading performance after the orientation. Hence it is inferred that the multisensory strategic orientation was equally beneficial to both the boys and the girls.

14. Students at risk of dyslexia in the Control group did differ significantly in phonological awareness and word recognition in the post-test than that of pre-test. There was no marked increase in the mean and median scores in phonological awareness and word recognition in the post-test than that of the pre-test.

15. Students at risk of dyslexia in the Control group did differ significantly in their oral reading fluency in the post-test than that of pre-test. There was a decrease in the mean and median scores in oral reading fluency in the post-test than that of the pre-test which indicates that traditional method of teaching was not found effective in enhancing oral reading fluency of these students.

16. Students at risk of dyslexia in the control group did not differ significantly in their alphabet knowledge in the post-test than that of pre-test. There was a decrease in the mean and median scores in alphabet knowledge in the post-test than that of the pre-test which indicates that traditional method of teaching was not found effective in enhancing alphabet knowledge of these students.

17. Students at risk of dyslexia in the experimental group did differ significantly in alphabet knowledge, phonological awareness, word recognition and oral reading fluency in the post-test than that of pre-test. There was marked increase in the mean and median scores in alphabet knowledge, phonological awareness, word recognition and oral reading fluency in the post-test than that of pre-test.

18. Students at risk of dyslexia in the Experimental group outperformed their counterparts significantly in the following components of reading in English in the post-test.
   a. alphabet knowledge, b. phonological awareness, c. word recognition and d. oral reading fluency. Hence the multisensory strategic orientation was found effective in enhancing the reading performance of students at risk of dyslexia.

19. Students at risk of dyslexia in the Control group and the Experimental group did differ significantly on interest towards reading. The mean rank of
20. There exists a relationship between interest towards reading and post-test scores on reading performance in English of the Control group. The correlation coefficient is found as 0.28 which indicates positive weak relationship between reading interest and reading performance in English.

21. There exists a significant relationship between interest towards reading and post-test scores on reading performance in English of the Experimental group. The correlation coefficient is found as 0.57 which indicates positive strong relationship between reading interest and reading performance in English.

22. The gain score for the Control group on reading performance in English is 1.07 and its percentage is 0.31%. There was no marked increase in the reading performance of students at risk of dyslexia in the control group.

23. The gain score of the Experimental group on reading performance in English is 65.64 and its percentage is 18.75%. There was marked increase in the reading performance of students at risk of dyslexia in the experimental group.

24. The gain score of the Experimental group reading performance in English is greater than that of the Control group on reading performance in English.

25. The reading performance in English of students at risk of dyslexia in the Experimental group is greater than that of Control group in the post-test. The effect size for overall reading performance was found as r =0.86 which indicates large effect size.

26. Orienting through multisensory strategies enhanced the oral reading fluency of students at risk of dyslexia.

27. Alphabet knowledge of students at risk of dyslexia in the Experimental group significantly increased after the orientation through multisensory strategies.

28. Students who were mildly and severely at risk of dyslexia benefitted through multisensory strategic orientation.

29. Multisensory strategic orientation supplemented with technology enhanced the reading performance of students who were mildly and severely at risk of dyslexia.
6.3 Discussion

A number of research studies stated that students with dyslexia and at risk of dyslexia have persistent difficulties in acquiring reading skills (Fletcher, et.al., 2002; Crombie, 1997). These students need to be provided appropriate reading interventions (Reghu, Cadathuz, Dileep, Roshni and Vijayan (2014); Snowling, 2013; Vellutino, et al., 2006) in order to minimize their problems in learning to read and develop their reading performance. Researchers namely Ramaa (2000), Torgesen, et.al (1999), Ball and Blachman (1991) and Hatcher et al. (2004) have suggested that students with dyslexia and at risk of dyslexia should be given appropriate reading intervention to improve their reading performance. The present study has taken cognizance of the suggestions and attempted to develop a multisensory strategic orientation for enhancing the reading performance of the students at risk of dyslexia.

Students at risk of dyslexia in the control group were not found to have significant improvement on reading performance in the post-test. The mean and median score of the control group in the pre-test and the post-test are 43.13, 42.50, 44.38 and 44.50 respectively. This indicates that there is a slight increase in the post-test but there was no remarkable increase in the post-test than that of the pre-test of the Control group. The result confirms that the students at risk of dyslexia need to be provided appropriate reading intervention based on their needs to reduce their reading difficulties. There are abundant of research studies that substantiates the statement that need based reading intervention helps to improve the reading skills of students with dyslexia and at risk dyslexics than the traditional method of teaching (Khan Zeenat M (2014); Ryder, et al., 2008; Van Daal & Reitsma, 2000; Magnan & Ecalle, 2006). Many research studies have suggested that dyslexics and at risk of dyslexic students’ reading problems can be reduced through providing intensive and systematic multisensory reading interventions (c- Morris et al., 2012; Vellutino, 1991: Rayner, et al., 2002; Griffin, et al., 1998; Torgesen, et al., 2001; Jeyasekaran, 2015; Torgesen, et al., 1997; Foorman et al., 1997; Oakland, et al., 1998; Joshi, et al., 2002; Shaywitz et al., 2004). Thus, the finding of the present study reinforces the findings of the previous research studies (Hwee & Houghton 2011; National Reading Panel, 2000; Donnell, 2007; Bradford, 2008; Hazoury, Oweini & Bahous, 2009; Van der Putten, Vlaskamp, &
Schuivens, 2011) that the students at risk of dyslexia need to be given appropriate reading intervention to enhance the reading performance.

At risk of dyslexic students in the Experimental group significantly improved in their reading performance in English in the post-test. The mean and median score of the experimental group in the pre-test and the post-test are 43.12, 44.00, 108.76 and 108.00 respectively. It is interesting to note that there was high increase in the post-test than that of the pre-test of the Experimental group. Thus, the result indicates that multisensory strategic orientation enhanced the reading performance of at risk dyslexics. It can be inferred that the multisensory strategic orientation focused on providing explicit and intensive instruction based on their needs in reading. In addition, technology was used as a supplementing device in the process of teaching reading to gain the attention of the students. The finding of the present study is in line with the findings of the previous studies conducted in the field of dyslexia (Torgesen and Theodore A. Barker (1995; Torgesen, et.al, 2000; c- Hall et al., 2000; Lally, 2001; Elbro, 1996; Wise, et al., 1999; National Reading Panel, 2000; Van Daal & Reitsma, 2000; Saine, Lerkkanen, Ahonen, Tolvanen, & Lyytinen, 2011). As reading performance in the post-test is significantly greater than that of the pre-test compared to Control group and Experimental group, the orientation is proved to be more effective.

As it is noticed from the result of the Mann-Whitney U Test (Table 5.T.8) that the students in the Experimental group have shown high improvement on reading performance than that of the Control group students in the post-test. The mean and mean rank of the Control group and the Experimental group in the post-test are 44.38, 8.50, 108.76 and 25.00 respectively. Hence, the multisensory strategic orientation supplemented with technology was found effective in enhancing the reading performance of students at risk of dyslexia. The finding of the present study is in agreement with the findings of the previous research. Many studies had shown a significant improvement in the reading performance of at risk dyslexics as well as dyslexics who were given intensive reading intervention based on their needs (Jeyasekaran, 2015; Zeenat & Dandegoankar, 2014; Krishnan, 2012; Torgesen, et al, 2010; Bharti Sharma, 2010; Bailey, et al, 2009; Vellutino, et al, 2006; Torgesen & Barker, 1995; Rozario, Kapur & Shivaji, 1994; Dynarski et al., 2007; Magnan, Ecalle,
Veuillet, & Collet, 2004; Segers and Verhoeven, 2005; Torgesen, Wagner, & Rashotte, 1997; Foorman et al., 1997; Hall et al., 2000; Lally, 2001; Soe, Koki & Chang, 2000; Torgesen & Barker, 1995; Heimann et al., 1995; Nicholson, Fawcett & Nicholson, 2000; Underwood, 2000; Hecht & Close, 2002). The finding of the present study was validated through comparing with the related studies that reading problems could be reduced through intensive multisensory strategic orientation integrated with technology when provided at the earliest stage of dyslexia. Moreover, multisensory instruction helps to provide instruction through different modes of learning such as visual, auditory, kinaesthetic and tactile mode. Further, several research studies have demonstrated positive effects of technology integrated reading interventions for dyslexics and at risk dyslexics (Magnan & Ecall, 2006; Wise, et al., 1999; The Spastic Society of Karnataka, 2004; National Reading Panel, 2000; Saine et al, 2011; Krishnan, 2012; Lonigan, et al., 2003)

It is evident from the result of the Wilcoxon Signed-Rank test (Table 5.T.9b) that there exists a significant difference between delayed post-test and post-test only in the Control group. The median value of the Control group in the pre-test, post-test and delayed post-test is 42.50, 44.50 and 43.00 respectively. It can be noticed that there was no remarkable increase on reading performance of students at risk of dyslexia in the Control group. The result indicates that the conventional method of teaching did not cater to the needs of students at risk of dyslexia for developing their reading performance. The finding of the present study is consistent with those of Joshi, Dahlgren & Baulware-Godden (2002) and Oakland, Black, Stanford, Nussbaum, & Balise (1998), where conventional method of teaching reading to students with dyslexia and at risk dyslexia did not develop the reading skills of these students. Taken together, these findings suggest that the students with dyslexia and at risk dyslexics need to be provided need based reading instruction (De Graaff, 2009; Vandervelden& Siegel, 1997; Joshi, et al., 2002). If the students with dyslexia were not provided appropriate reading intervention at the earliest they may have a chance of becoming severe dyslexics (Snow, Burns, & Griffin, 1998; Thomas & Whitten, 2012; Thomas, Bhanutej, & John, 2003; Ramaa, 2000; Jeyasekaran, 2015).
It is evident from the result of the Friedman’s Test (Table 5.T.10a) that there exists a significant difference among the pre-test, post-test and delayed post-test in the Experimental group. The median value of the Experimental group in the pre-test, post-test and delayed post-test is 44.00, 108.00 and 105.00 respectively. It can be noticed that there was a high increase in the post-test on reading performance of students in the Experimental group after the orientation. Another interesting finding to report that reading performance of all the students in the delayed post-test is greater than the pre-test in the Experimental group. It can be inferred that multisensory strategic orientation is effective for developing the reading performance at risk dyslexics than the conventional method. The studies conducted by Pokorni, Worthington and Jamison (2004) and Justice, Chow, Capellini, Flanagan, & Colton (2003) confirmed that the students with dyslexia who were provided need based reading interventions for the duration of six weeks significantly improved their reading skills after the intervention. The findings of the present study indicate that students at risk of dyslexia have gained significant improved in reading performance after six week orientation through multisensory reading strategies. The findings of the present study have accordance with the findings previous research studies (De Graaff, et al., 2009; Watts, & Gardner, 2013).

It is another interesting fact to be noticed in the result of Mann-Whitney U Test (Table 5.T.12) that there is no statistically significance difference in the post test scores on reading performance of boys and girls in the Control group. The mean and mean rank of the boys and girls in the control group are 44.56, 8.67, 44.14 and 8.29 respectively. Numerous research studies in the field of dyslexia documented that more number of boys were affected with specific reading disabilities than girls (Wheldall & Limbrick, 2010; Miles, Haslam & Wheeler, 1998; Apostolara, Tsoumakas, Diomidous, & Kalokerinou, 2010). On contrary, other research studies reported that equal number of boys and girls were affected with specific reading disabilities (Shaywitz, Shaywitz, Fletcher & Escobar, 1990; Siegel & Smythe, 2005). But one fact is common in all research studies is that both boys and girls who were affected with specific reading disabilities experience same pattern of reading difficulties and their reading performance was also same after receiving remedial reading intervention (Jiménez, 2011; Share & Silva, 2003). A study conducted by Krishnan (2012) reported that the
demographic variable gender did not make difference in the reading performance of the students with dyslexia. The finding of the present study also reinforces the findings of the previous studies that there is no significant difference in the scores on reading performance of boys and girls (Chan, Ho, Tsang, Lee, & Chung, 2007; Jiménez, et al., 2011).

Also in the experimental group, the boys and girls did not differ significantly in their reading performance in English in the post-test. The mean and mean rank of the boys and girls in the experimental group are 108.1, 8.83, 109.5 and 9.19 respectively. The results indicate that there is no significant difference in the reading performance of the boys and the girls in the Experimental group. The finding can be inferred that both boys and girls in the Experimental group equally benefitted by the multisensory strategic orientation for developing their reading performance. The finding of the present study has disagreement with the finding of the previous study done by Hawke, Lolson, Willcut, Wadsworth and DeFries (2009). They found that there was a significant difference between the boys and the girls in their reading performance. But the finding of the present study is in line with the findings of the study done by Jiménez, et al. (2011).

The research conducted by Stansberry (2009), Guthrie and Wigfield (2000), Stanovich (1986), Taylor, Frye and Maruyama (1990), and Walberg and Tsai (1985) indicated that reading interest has a strong positive relationship with the development of reading performance. From the findings of the present study it is evident that reading interest of the students at risk of dyslexia was enhanced through the multisensory strategic orientation. These students interest towards reading can be developed through providing appropriate differentiated reading intervention. Students at risk of dyslexia in the Control group and the Experimental group did differ significantly on interest towards reading. The mean rank of the Experimental group on interest towards reading is higher than that of the Control group. There was a positive weak relationship between interest towards reading and reading performance in English of the Control group. In Experimental group, there was a positive strong relationship between interest towards reading and reading performance in English. It can be inferred that multisensory strategic orientation enhanced the interest of the students towards reading.
Multisensory strategic orientation was effective in developing alphabet knowledge, phonological awareness, word recognition and oral reading fluency of the students at risk of dyslexia than that of conventional method. The statistical outcome revealed that the multisensory strategic orientation have recorded a significant improvement in the reading performance of students at risk of dyslexia. It can be inferred that the strategic orientation was developed based on the needs of the students through diagnosing their difficulties in reading. Research studies emphasized the need based remedial reading interventions for students with dyslexia. The findings of the empirical studies conducted by Scanlon (2005), Duff (2008) confirmed that need based differentiated intervention improve the reading skills of dyslexics. The present study is in agreement with the above mentioned studies.

The primary purpose of this research study was to improve the reading performance in English of students at risk of dyslexia through multisensory strategic orientation. The descriptive and inferential statistics showed that the Experimental group who had received the multisensory strategic orientation significantly improved in their reading performance than that of the Control group who were taught through traditional methods. The effect size was found as 0.86, a large effect size which indicates multisensory strategic orientation supplemented with technology increased the reading performance of students at risk of dyslexia. These findings of the present study are consistent with previous research that found appropriate early reading intervention increases reading skills of dyslexics (Ramar & Jeyabalakrishnan 2013; Bailey, et al, 2009; Ryder, Tunmer and Greaney, 2008; Vellutino, et al., 2006; Hwee & Houghton 2011; Zeenat, 2014; Akila Sadasivan, 2009; Sheeba Krishnan, 2012).

In this study, the researcher provided multisensory strategic orientation intended to develop the reading performance of students at risk of dyslexia studying in a rural school and analyzed whether there has been an improvement on reading performance in English after the orientation. From the findings of the present study, it is observed that there is a marked increase between the students at risk of dyslexia in the Experimental group and the Control group in terms of their reading performance in English. These findings prove that the multisensory strategic orientation has a distinct impact on enhancing the reading performance of the students at risk of dyslexia. Considering the
outcomes of the study, it can be concluded that the orientation of multisensory strategies lead to an increase in reading performance of at risk dyslexics. The findings of the present study supports the previous studies (Wilson & O’Connor, 1995; Jeyasekaran, 2015; Magnan & Ecalle, 2006; Hwee & Houghton 2011) in which the efficacy of need based intervention to students with dyslexia and their reading performance were studied. Thus the present study found that multisensory strategic orientation was effective in enhancing the reading performance in English of students at risk of dyslexia.

6.4 Recommendations and Educational Implications of the Present Study

The major findings of the present study revealed that post-test scores of the students at risk of dyslexia in reading performance are significantly greater than that of the pre-test. It was found that there was a significant difference between the pre-test and the post-test in the reading performance with reference to components of components of reading, which clearly shows the positive influence of multisensory strategic orientation on enhancing reducing the reading difficulties of students at risk of dyslexia.

It is also noted that there is a marked increase in the post test in alphabet knowledge, phonological awareness, word recognition and oral reading fluency, when compared to the pre-test which claims the effectiveness of multisensory strategic orientation for developing reading performance of students at risk of dyslexia. On the basis of the statistical treatment and qualitative analysis of the data, the recommendations and educational implications have been evolved and discussed:

1. From the findings of the study it is evident that the multisensory strategic orientation was found effective in enhancing the reading performance of students at risk of dyslexia and the same may be used by the teachers for the students in the normal classroom.

2. As multisensory strategic orientation is found effective in teaching alphabet knowledge, phonological awareness, word recognition and oral reading fluency to students at risk of dyslexia, it may be used to teach different components of reading to enhance their reading performance.
3. As multisensory strategic orientation is proved to be enhancing reading performance in English of students at risk of dyslexia, the teachers can make use of the intervention for training the students at risk of dyslexia in developing their reading skills.

4. Though teaching strategies are familiar to the language teachers, the teachers need to be trained to integrate new teaching strategies with multisensory approach to teach the students at risk of dyslexia for developing their reading skills and also they must be well acquainted with the use of latest innovative teaching strategies.

5. The multisensory strategic orientation found effective in improving the reading performance in English of students at risk of dyslexia would probably prove effective in the case of normal students as well as both for remedial and instructional purpose.

6.5 **Recommendations for Teachers**

According to the findings and discussion from the present study, the following recommendations were made for the teachers at primary level:

1. The At Risk of Dyslexia Screening Tool (ARDST) is recommended for the teachers to identify the students at risk of dyslexia at primary level.

2. As the present study found that the multisensory strategic orientation was effective in enhancing alphabet knowledge, phonological awareness, word recognition and oral reading fluency. The teachers are recommended to use the multisensory strategic intervention to enhance the reading performance of students at risk of dyslexia at primary level.

3. As the multisensory strategic orientation was developed based on the needs of the students, the teachers are recommended to diagnose the reading difficulties of students at risk of dyslexia and accordingly make modifications in the multisensory strategic intervention to enhance the reading performance of students at risk of dyslexia at primary level.

4. As it is evident from the case analysis of the present study that there was an inconsistency in the reading performance of severely at risk of dyslexic student
who was oriented through multisensory strategies for six weeks only. Hence, the researcher recommends the teachers to provide the multisensory strategic intervention for a longer duration or throughout the academic year for enhancing the reading performance in English of severely at risk of dyslexic students at primary level.

5. As the findings of the case analysis of the present study indicates that there was a gradual progress in the reading performance in English of the student mildly at risk of dyslexia through the multisensory strategic orientation. Hence the researcher recommends the teachers to use the multisensory strategic intervention to enhance the reading performance in English of the student mildly at risk of dyslexia at primary level.

6. Multisensory strategic orientation is recommended for the teachers as an alternative to enhance the reading performance in English of students at risk of dyslexia at primary level.

6.6 Recommendations for Policy Decisions

Research in general and educational research in particular must be committed to contribute to recommendations for future policy decisions on the basis of the findings of the research. In that way the present study suggests the following recommendations for policy decisions for enhancing reading performance of students at risk of dyslexia:

1. Orientation may be given to the teachers for earlier identification of students at risk of dyslexia at primary level.

2. Orientation may be given to the teachers for developing earlier intervention programmes for the students at risk of dyslexia at primary level.

3. As At Risk of Dyslexia Screening Tool (ARDST) was developed by the investigator to identify at risk dyslexics at primary level, the teachers at primary level may be oriented to device screening tools to identify the students at risk of dyslexia.

4. As the multisensory strategic orientation was prepared only for the III standard by the investigator of the present study. Initiatives may be taken to orient the
teachers at primary level for developing similar types of strategic orientation for other standards at primary level.

5. A multisensory strategic orientation may invariably be given to the needy students at risk of dyslexia at all levels, as the orientation was proved to be effective in the present study.

6. The teachers in the mainstream schools may be trained to use the multisensory strategic intervention to teach the students at risk of dyslexia in the schools. The Directorate of School Education, Puducherry may take initiatives to train the school teachers through Sarva Shiksha Abiyan programme to use the multisensory strategic intervention for enhancing the reading performance in English of students at risk of dyslexia at primary level.

7. The school teachers at primary level may be trained to diagnose the reading difficulties of students at risk of dyslexia and accordingly make adaptations in the multisensory strategic intervention to teach these students for enhancing their reading performance in English.

8. The Sarva Shiksha Abiyan Programme under Directorate of School Education may organize in-service training programmes for the teachers to identify the students at risk of dyslexia in the mainstream schools and train the teachers to use innovative strategies to teach the students at risk of dyslexia with the help of subject experts in the field of special education and English.

9. As a part of the present study, the researchers (Kamala and Ramganesh, 2013) found that there was an average level of knowledge about Specific Learning Disabilities among teacher educators in Puducherry Region. Therefore the concern department may take initiatives to raise the knowledge about Specific Learning Disabilities among teacher educators in Puducherry Region through organising orientation programmes to these teacher educators to raise their knowledge about Specific Learning Disabilities.
6.7 Suggestions for Further Research

Any good research even after answering its research questions must be inclined to update and innovate new ideas for further contributions to the needy people. In that way, the following suggestions are made for further investigations:

1. Through administering a diagnostic test it was found that students in the present study had problems in letter reversals. A further study may be attempted to explore the causative factors of letter reversals problems of students at risk of dyslexia.

2. The findings of the present study revealed that multisensory strategic orientation enhanced the oral reading fluency of students at risk of dyslexia and the orientation could not completely alleviate the oral reading errors of them. It is suggested for further study to explore the causes of oral reading errors of students at risk of dyslexia.

3. Although the motivations such as word games, story telling, etc., were administered during the experimentation, the researcher had bottlenecks to draw the attention of all the students for readiness of the experimentation. Hence unfulfillment of motivation of the students was experienced which could be seriously viewed.

4. After diagnosing the needs of the students at risk of dyslexia, the researcher developed a multisensory strategic orientation by taking into account the senses such as visual, auditory and kinaesthetic for improving their reading performance. As the study could not assess the influence of the senses of multisensory strategic orientation. A study may be attempted to ascertain the predominant influence of the senses for enhancing reading performance in English.

5. As it is noted from the case analysis, there were inconsistencies in reading performance in English of the student severely at risk of dyslexia. Due to the time constraints and access to the sample, the orientation was given for six weeks only. A study may be attempted to ascertain the efficacy of multisensory strategic intervention so as to address the causes of inconsistency in the reading performance of students who are severely at risk of dyslexia.
6.8 Conclusion

Questions about how to teach reading to students at risk of dyslexia have been with us for a very long time. Despite truly significant advances in our understanding of the nature of dyslexia and of the reading process itself, there remain large gaps in our knowledge about how to assist at risk of dyslexics to learn to read effectively. What the researcher observed in the present study and other research studies were that multisensory strategic intervention of the right nature and intensity can improve the reading performance in English of students at risk of dyslexia at primary level. The multisensory strategic intervention will be of great help for alleviating the reading difficulties of students at risk of dyslexia at primary level.

The programme, Sarva Shiksha Abiyan (SSA) insists on early identification of dyslexics and the development of reading performance of these students at all levels. In the light of the research findings, it is felt that the present piece of research may contribute to alleviate the difficulties in reading and enhance the reading performance in English of students at risk dyslexia studying in the rural schools through multisensory strategic orientation supplemented with technology. It is hoped that appropriate reading intervention so called multisensory strategic intervention may be given for the needy at risk of dyslexics and the findings of the study may be taken into consideration for a better framework in developing reading performance in English of students at risk of dyslexia.

Also it is disheartening to state that in India, 10-14 percent of school going students were affected with Specific Learning Disabilities, in which 80 percent were identified as dyslexics. These students need to be provided appropriate need based interventions to alleviate their reading difficulties and enhance their reading performance. The modest efforts shall be taken with the prominent research initiatives to mitigate the problems of dyslexia. In that way the present piece of research work would be a stepping stone mechanism to address the issues of dyslexia. Therefore, there is an urgent need to gear up national effort towards the implementation of this multisensory strategic intervention to enhance the reading performance in English of students at risk of dyslexia.