CHAPTER – II

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

In this chapter, a detailed review has been done about the studies that give empirical base for the present study. A number of literatures from various sources were reviewed to study previous work related to the present study.

The reviews presented in this chapter are related to studies conducted on Kannada language skills, its orthographic rules, morphemes, etc. done in Indian context and the studies in abroad on effect of music on various variables like speaking, communication, intelligence, academic achievement, pronunciation, vocabulary acquisition, literacy, motivation, listening, speaking, reading, comprehension. The investigator found that no study done using music as method to see the effect on language competencies among primary school students in Indian context.

The reviewed studies are discussed as follows.

2.2 STUDIES RELATED TO MUSIC AND LANGUAGE SKILLS

In this section studies from abroad, related to effect of music on language skills like writing, reading speaking and listening were presented.

Donlan (1976) conducted study to measure the effect of music upon the spontaneous writing of students. The students’ writings were evaluated in terms of quantity and quality. Quantity and quality was measured by mean scores of word counts. The findings indicated that most students had a positive attitude when writing to music. The quality and quantity of the students’ writing was positively
influenced by using music as a stimulus. Patrick Kariuki and Cindy Homey Cutt (1998) also found that music effects on emotionally disturbed students’ writing motivations and writing skills. The evaluation focused on basic skills such as capitalization, punctuation, neatness, creativity and sentence sense. The experimental group used headphones and listened to classical, instrumental, country music, movie theme music, etc. while they were writing. But the control group wrote without music. The researcher documented the verbal and non-verbal behavior too. The results showed that the use of music as a means to improve writing skills, increase in volume of writing output and enhance writing motivation reflected a positive effect on emotionally disturbed students. Black J.G. (1996) conducted the study to explore the effect of classical music and art on writing abilities of high school students. The study compared four groups of high school students of differing abilities; treatment was given two days in a week about five weeks. The results revealed that treatment groups’ writing abilities improved significantly on their post test scores when compare to control group.

Grant, Audrey, Hutchison and David (2008) found that music has positive effect on writing and reading skills of primary school students.

Patrick Kariuki and Cindy Homey Cutt (1998) found that music the effect on emotionally disturbed students’ writing motivations and writing skills.

The above studies concentrated up on the writing skills of emotionally disturbed students and high school students. These studies had given importance for quantity and quality of writing skills by providing only background music but not on the singing and vocal music.
Hood, Mincey, Hollie (2005) found that participation in music classes made no difference in reading and mathematics achievement among fifth grade students. Fetzer, Lorelei (1995) conducted a study to compare reading and writing abilities of young students from two schools, one school used music as a foundation for teaching and while other did not. The results showed that the music group not only improved more than control group in reading areas but also were more confident and enthusiastic about their reading abilities, while in writing both group showed progress. Carmon (2008) found that music influences positively on reading skills of first grade children without need to struggle with the technical learning of vowels and consonants. Linda Louise Kelley (1981) conducted a combined experimental and descriptive study to explore the effect of music on the reading/language arts performance of first graders. The regression analysis revealed that the strong impact of music treatment on concept development and reading performance of students found. Music enhanced attention skills, manipulation sound/strategy development, development of coordination of modalities, growth in self-concept and cooperation. Finally the study concluded that music showed demonstrated potential for enhancing reading and language development in the first grade students.

By synthesizing the above studies music has positive effect on language skills and Hood, et al. (2005) some negative result. So there is contradictory in results of researches.

Milovanov, Riia, et al. (2008) conducted study to examine the relationship between musical aptitude and second language pronunciation skills. They investigated whether children with superior performance in language production
represent musical sound features more readily in the pre-attentive level of neural processing compared with children with less-advanced production skills. Sound processing accuracy was examined in elementary school children by means of event-related potential (ERP) recordings and behavioral measures. Children with good linguistic skills had better musical skills as measured by the seashore musicality test than children with less accurate linguistic skills. The ERP data accompany the results of the behavioral tests: children with good linguistic skills showed more pronounced sound-change evoked activation with the music stimuli than children with less accurate linguistic skills. The results imply that musical and linguistic skills could partly be based on shared neural mechanisms.

Jennifer, R., et al. (2007) explored the relationship of phoneme segmentation in language to pattern perception in music. The research determined that first grade children’s tonal and rhythm Primary Measures of Music Audition (PMMA) scores were significantly related to their phoneme segmentation fluency skill. It further suggests that aural perception ability is required for both musical pattern discrimination and phoneme segmentation (Journal on Music Education, 2007).

Medina (2002) conducted a study to know the effect of music with pictures on vocabulary acquisition. She found that second language vocabulary acquisition can be enhanced by using music with conveying meaning in the ESL classroom. Music alone will not help the learners to acquire second language. She opined after research, that simply teaching students songs, though enjoyable, will not succeed at helping students to acquire the second language unless and until communicating meaning.
Wilcox, Wilma B. (1996) conducted a study to know the effect of music on pronunciation of target vocabulary in English language. He used songs and singing as a method of instruction, the findings showed though there was no difference between the two groups with regard to vocabulary and pronunciation, the additional findings from the post test audio tapes revealed qualitative evidence of improved fluency, recall, comprehension, and more in the music group.

The above studies from abroad revealed that music can be used to improve vocabulary of students at different levels. Music alone may not be useful to acquire language but integrating music with language teaching will help a lot in improving vocabulary, pronunciation, fluency, comprehension, etc.

2.3 STUDIES ON TEACHING LANGUAGE THROUGH DIFFERENT APPROACHES

The studies conducted on effect of multimedia i.e. use of music video, sounds and popular song lyrics, rhyme picture books were presented here. Apart from repeated reading techniques on rpm fluency, spiral approach, etc. Summer programme were of elementary school students presented here.

Verhallen, Maria and others (2006) conducted a study to know the positive effect of well designed and produced book-based animated stories on young viewers’ narrative comprehension and language skills. Sixty 5-year-olds, learning Dutch as a 2nd language, were randomly assigned to 4 experimental and 2 control conditions. The children profited to some extent from repeated encounters with a storybook with static pictures but more from repeated encounters with the animated form of the story. Both story formats were presented on a computer screen; both included the same oral text spoken in the same voice but the animated
story was supplemented with multimedia features (video, sounds, and music) dramatizing the events. Multimedia additions were especially effective for gaining knowledge of implied elements of stories that refer to goals or motives of main characters, and in expanding vocabulary and syntax. The added value of multimedia books was strengthened over sessions. In a group from families with low educational levels who were lagging in language and literacy skills, multimedia storybooks seem to provide a framework for understanding stories and remembering linguistic information (Journal of Educational Psychology, May 2006).

Fredricks, Lori and others (2006) conducted a study to motivate students placed in remedial reading courses (after several semesters of college coursework). Students were taught through many reading strategies and skills with engaging, “entertaining” texts, through guided practice, with applying those skills to more academic texts that they encountered in their coursework and on standardized exams. This approach involved reading instructors’ selecting materials from the internet, including movie reviews and popular song lyrics that many students find familiar. Experience with Regents’ reading course students has shown that students become more engaged in discussion and more likely to remember texts and strategies when the readings relate to topics that interest them, including popular films and music (An International Online Journal, April 2006, Vol. 6, Issue 1, p106-112, 7p AN 23044086).

Yang Hai Cheni (2009) conducted research to test whether instruction using rhyme picture books improved non-native English speakers phonological awareness and reading ability significantly more than sigh reading instruction. In
addition to test whether there is a relationship between phonological awareness and reading.

The two cases of 3rd grade EFL students studying taken for study. Data analysis pursued both from pre and past used TOPA and Cambridge examination for young learners. The qualitative data came from the researchers’ field notes and an interview with the control group teacher. t-tests used to analyse both the groups. The results showed that the experimental group significantly improved their phonological awareness compared to control group. With respect to the relationship between phonological awareness, the results showed that there was a moderate corresponding correlation. In the control group with respect to the relationship between correlation in the post tests of experimental group, but no corresponding correlation in the control group. The qualitative data showed that the background knowledge had no significant difference on improving phonological awareness. Usage of rhyme picture books for phonological awareness instruction helped students improve their phonological awareness and it also helped students to remember the words and sounds, and as a result improved their reading ability.

Landa, Katrina, G. (2009) conducted a study on effects of repeated reading on reading abilities of English learners with specific learning disabilities. The study investigated the effects of repeated English language learners (ELL’s) with specific learning disabilities (SLD). A multiple baseline probe design across subjects was used to explore the effects of repeated readings on four dependent variables: reading per minute (rpm), types of error per minute and answer to literal baseline, intervention, generalization probes and maintenance probes. Throughout
the baseline and intervention phases, participant read a passage aloud and received error correction feedback. This was followed by fluency and literal comprehension question assessments. During intervention this was followed by two oral repeated readings of the passage. Then the fluency & literal comprehension questions assessments were administered. The results indicated that repeated reading had a positive effect on the reading abilities of ELL’s with SLD. The study suggested for further research work for how repeated readings can be integrated in to classroom instruction and assessments.

Peterson, Douglas, B. (2010) conducted a study to investigate the validity of measures that were hypothesized to account for significant variance in English reading ability. During Kindergarten 63 bilingual Hispanic children completed letter identification. English and Spanish phonological awareness, rapid automatized naming, and sentence repetition static assessment tasks. They also completed a dynamic assessment non sense word decoding strategy, and temporally related working memory information. One week prior to kindergarten, information gathered regarding socio economic status, pre-school attendance, English & Spanish language dominance and language ability. At the end of the first grade, the same children completed word identification, decoding & reading fluency tasks designed to represent the narrow view of reading. Reliability, content relevancy, construct validity & predictive evidence of validity explained. The dynamic assessment of reading strategy surfaced as a parasimonivous, valid means of predicting first grade word level reading ability for Hispanic bilingual children when compared to multiple English Spanish and ELS static measure, the
dynamic measures accounted for equivalent variance in the majority of first grade reading measures and had superior classification accuracy.

Zhang Yang Tang (2010) conducted a study to know the effect of spiral approach for L2 reading learners which contained 3 phases are built around the same theme and spiral up from reading comprehension of the text to the demonstration of reading comprehension through tasks and finally handling authentic reading materials in simulated culturally appropriate tasks. The study revealed that the spiral instruction has many advantages over conventional instruction. It enhanced learners comprehension of the text, improve their reading competence and motivate them to extend their engagement in reading activities. Learners can tap in to more mental resources during the reading process so that they will retain better long memories.

Kulich, Lynne Schlarb (2009) conducted a study to examine describe and analyse the social interactions that occurred between three Karen ELLS and the researcher during a reading intervention program, as well as the impact that a modified fluency development lesson had on the English reading development of these ELLS. The three ELLS attended this 9 week summer program for a total of 4½ hours a week, findings from this study suggest that the three ELLS appeared to benefit from a variety of instructional scenarios, that is one-on-one instruction, large and small group & peer assisted instructions, provided ELL opportunities to experience literacy while engaged in numerous authentic social interactions. The ELLS showed improvement based on the analysis of their pre and post test fluency and comprehension scores. Fluency development lessons significantly impacted
the literary progress of three ELLS and more over impacted their overall ability to function successfully in their regular classroom settings.

Mountian and Stephanie, M. (2010) conducted a study on summer reading program for Title I students. The purpose of this action research study was to determine the effectiveness of the ABC school districts summer reading program in rising Title I students reading comprehension, fluency and vocabulary skills for title I students who attended the program. The findings resulted in recommendation for changes of the program. The findings resulted in recommendations for changes to the current program based on study resulted and research of best practices. The research questions were: 1. What are the best educational practices for teaching reading in elementary summer reading program? 2. How do the teachers who taught in the ABC school district perceive the summer reading programs effectiveness as an intervention to help students struggling in reading comprehension, fluency and vocabulary? 3. What instructional techniques did the summer reading program teachers of the ABC school district use to facilitate student learning? What were the summer reading instructional techniques used by the teachers in the ABC school district effective in raising students reading comprehension, fluency and vocabulary levels? The effectiveness of the program was based on teachers observations and perceptions. In addition the effectiveness was determined by the increase of test scores in the area of reading based upon the Gates-Macgini Tie reading tests and Missorie assessment programs administered in 2006-07 and 2007-08. The surveys concluded that although the teachers believed the current summer readings program was beneficial so students had the opportunity to continue reading academically there were many areas of the
program structured that needs the analysis of the test scores concluded there was not a significant difference in reading achievements levels of students who attended the summer reading program compared to the students who chose not to attend.

Braxton, Diane, M. (2009) conducted a study to explore the effect of two summarization strategies to explore the effect of two summarization strategies using expository text on the reading comprehension and summary writing of fourth and fifth grade students. The study used a quasi experimental pre and post test design, generating interactions between schemata and text and rule based were taught. 4 intact classes participated in fifteen 40 to 50 minute lessons two groups were taught through gist instruction; other two groups received rule based instruction. The qualitative reading inventory-4 was used to determine the effects on the expository reading comprehension.

The results suggest that both summarization methods can improve the expository reading comprehension and summative writing of students. The study found that teaching through summarization strategy improves the reading achievement especially with students who are lagging behind their peers in the area of reading (Dissertational Abstract International).

The above studies conducted to know the effect of different approaches, methods, strategies on different language skills, especially more focused on reading comprehension and reading aloud.

The techniques and strategies used were effective in improving language skills of learners of second language and English language.
Different research used different strategies like multimedia techniques, rhyme picture books, repeated reading techniques, spiral approach, summer programmes, etc. approaches to develop the reading and other language skills. The results of these studies showed that use of above strategies improved when compare to traditional method of teaching language.

2.4 STUDIES RELATED TO MUSIC THERAPY

Here the studies related to music therapy on various areas like speech sound duration in foreign language, language arts performance, English as second language (ESL) and music as therapy techniques for academic subjects like language, music and reading/language performance, the teacher language choral rehearsal of middle school students, musical aptitude and linguistic skills, communication interactions presented here.

Kennedy and others (2005) conducted a study to investigate the effects of music therapy techniques on the story retelling and speaking skills of English as Second Language (ESL) middle school students. Thirty-four middle school students of Hispanic heritage, ages 10-12, in high and low-functioning groups participated in the study for 12 weeks. Pretest to posttest data yielded significant differences on the story retelling skills between the experimental and controlled groups. Chi Square comparisons on English speaking skills also yielded significant results over three months of music therapy intervention. A variety of music therapy techniques were used including music and movement, active music listening, group chanting and singing, musical games, rhythmic training, music and sign language, and lyric analysis and rewrite activities as supplemental activities to the ESL goals and objectives. Comparisons of individual subjects’
scores indicated that all of the students in the experimental groups scored higher than the control groups on story retelling skills (with the exception of 1 pair of identical scores), regardless of high and low functioning placement. Monthly comparisons of the high and low functioning experimental groups indicated significant improvements in English speaking skills as well (Journal of Music Therapy, 2005).

Freer and Patrick (2008) conducted a study to investigate the relationship between teacher language use and student quality of experience during choral rehearsals. Particularly at the middle school level, few data exist about the ways in which instructional discourse during rehearsals affects student experience. Existing research suggests the use of instructional scaffolding as effective in enhancing student learning and experience, but this had not been previously investigated during music rehearsals. The language of two teachers during 20 rehearsals was recorded and examined for evidence of instructional scaffolding and sequential units of instruction; student self-reports of affect, challenge and skill were correlated with the teachers’ language. Students reported higher levels of challenge and skill (often referred to as ‘flow experience’) during rehearsals with greater use of scaffolding language. Analysis suggests that a strong positive relationship exists between teachers’ use scaffolding language, complete sequential units of instruction, and quality of student experience during middle school choral rehearsals. Teacher instructional language and student experience in middle school choral rehearsals (Music Education Research, 2008).

Milavonov and others (2009) conducted a study to examine 10–12-year old elementary school children’s ability to pre-attentively process sound durations in
music and speech stimuli. In total, 40 children had either advanced foreign language production skills and higher musical aptitude or less advanced results in both musicality and linguistic tests. Event-related potential (ERP) recordings of the mismatch negativity (MMN) show that the duration changes in musical sounds are more prominently and accurately processed than changes in speech sounds. Moreover, children with advanced pronunciation and musicality skills displayed enhanced MMNs to duration changes in both speech and musical sounds. Thus, the study provides further evidence that musical aptitude and linguistic skills are interconnected and the musical features of the stimuli could have a preponderant role in pre-attentive duration processing found that music has positive effect on language skills among primary school students between 10 and 12 years.

Gall and others conducted a study to examine ways in which new technologies can be used in educational settings to enhance learning. Research was carried out across a range of school subjects: English, history, geography, mathematics, modern foreign languages, music and science and the work of two teachers within the same primary school who devised an initiative to support the development of composition skills of children aged 10 and 11, using Dance eJay software. They explored the ways in which collaborations took place between the pupils, arguing that eJay provides a rich mediational tool where creative outcomes are negotiated. They suggested that the computer workstation provides the mediational means by which all pupils – whether or not they possess formal instrumental skills – can be creative, working within a musical style in which they are culturally located. They also proposed that the teacher is central to the creative–collaborative process and suggest implications for teachers when
planning for creative, collaborative work in the classroom using music software such as eJay (International Journal of Educational Research, 2008).

Niland (2007) conducted a study using musical component to stories and a narrative dimension to songs and musical selections and findings showed the results that communication and interactions of young children can be enhanced through music.

Cassidy, Jane, W. (1992) conducted a study to examine the pairing of concrete stimuli (pictures and gestures) with auditory stimuli, and the ability of pre-school children to respond correctly to questions asked about an excerpt of music. 48 children were involved, 24 of whom had communication disorders. The others had communication abilities typical for children that age (3-6 years). Each group was broken in to 3: 1 control group was played a song, after which they were asked, was this song loud or soft? (fast or slow). The visual group were given pictures to use for association”.

Jentschke and others (2009) conducted a study to know whether musical training modulates the development of syntax processing in children or not and a question of how musical training can influence perceptual and cognitive abilities of children has been the subject of numerous past studies. However, evidence showing which neural mechanisms underlie changes in cognitive skills in another domain following musical training has remained sparse. Syntax processing in language and music has been shown to rely on overlapping neural resources, and this study compared the neural correlates of language-and music-syntactic processing between children with and without long-term musical training. Musically trained children had larger amplitudes of the ERAN (early right anterior
negativity), elicited by music-syntactic irregularities. Furthermore, the ELAN (early left anterior negativity), a neurophysiological marker of syntax processing in language, was more strongly developed in these children, and they furthermore had an enlarged amplitude of a later negativity, assumed to reflect more sustained syntax processing. Thus, the data suggested that the neurophysiological mechanisms underlying syntax processing in music and language are developed earlier, and more strongly, in children with musical training.

Robert Slevc, Miyake and others (2006) conducted a study to examine the relation between musical ability and second-language (L2) proficiency in adult learners. L2 ability was assessed in four domains: receptive phonology, productive phonology, syntax, and lexical knowledge. Also assessed were various other factors that might explain individual differences in L2 ability, including age of L2 immersion, patterns of language use and exposure, and phonological short-term memory. Hierarchical regression analyses were conducted to determine if musical ability explained any unique variance in each domain of L2 ability after controlling for other relevant factors. Musical ability predicted L2 phonological ability (both receptive and productive) even when controlling for other factors, but did not explain unique variance in L2 syntax or lexical knowledge. These results suggest that musical skills may facilitate the acquisition of L2 sound structure and add to a growing body of evidence linking language and music (Psychological Science, 2006).

Jenny R. Saffran (2003) found that musical learning has positive effect on language development.
Rimland and Edelson (1994) found that there were positive changes in general behaviour of children including communication skills.

Herman (1985) found that children express their feeling, effectively as a result of intervention based on music.

Miller (1982) music developed receptive and expressive language skills.

Tietze, Richard L (2008) conducted a case study to follow-up to Tietze (2006), which explored the potential relevance of listening to Jazz as a tool for enhancing the undergraduate liberal arts educational experience. A holistic pedagogical structure, based on a model incorporating cognitive and emotional dimensions of experience and Erikson’s (1997) theory of identity development, utilized recent developments in neuroscience including the brain’s engagement in the process of creativity, and was applied to developing an undergraduate course titled, “Jazz and American Identity.” Results indicated that a proactive approach toward combining play, art, and self-understanding forms an example of a creative process every human may engage in—the creation and development of one’s unique identity. Anecdotal journal writing as data to “translate” listening and expressive skills to more clearly articulate human experience of emotional states, relationships between verbal and procedural memory, parallels between language and music processing, and connection between the worlds of science and the arts, especially the expansion of Jazz into a world-wide phenomenon (Psychology of Aesthetics, Creativity and the Arts, 2008).

Habib, Michel and others (2009) conducted a study to Musical expertise, often linked to early and intensive learning, is associated with neuro anatomical distinctive features that have been demonstrated through modern neuroimaging
techniques, especially magnetic resonance imaging (MRI). These distinctive features are present in several brain regions, all more or less involved either in gestural motor skill (therefore probably related to the use of an instrument) or auditory perception. There also is growing evidence that learning music has more general effects on brain plasticity. One important notion, related to this topic, is that of a probable “sensitive period” around 7 years of age, beyond which music-induced structural changes and learning effects are less pronounced. These data are discussed in the perspective of using music training for remediation in children with specific language and reading disorders (Music Perception, 2009).

Forgeard, Marie and others (2008) conducted a study to explore the relation between music and phonological processing in normal-reading children and children with dyslexia. They found a strong relationship between musical discrimination abilities and language-related skills. In normal-reading children, musical discrimination predicted phonological and reading skills (Studies 1 and 2). These relationships were stronger in children with music training than in control children without music training. In children with dyslexia, musical discrimination predicted phonological skills, which in turn predicted reading abilities (Study 3). Furthermore, normal-reading children with music training surpassed both normal-reading controls and children with dyslexia in melodic discrimination. Controls also outperformed children with dyslexia (Study 4). Taken together, these findings suggest that a music intervention that strengthens the basic auditory music perception skills of children with dyslexia may also remediate some of their language deficits (Music Perception, 2008).
Norton, Andrea and others (2005) conducted a study to test the brain’s structural enlargement of adult musicians’, and music training in childhood on visual–spatial and verbal outcomes. They compared 5-to 7-year-olds beginning piano or string lessons (n =39) with 5-to 7-year-olds not beginning instrumental training (n =31). All children received a series of tests (visual–spatial, non-verbal reasoning, verbal, motor, and musical) and underwent magnetic resonance imaging. They found no pre-existing neural, cognitive, motor, or musical differences between groups and no correlations (after correction for multiple analyses) between music perceptual skills and any brain or visual–spatial measures. However, correlations were found between music perceptual skills and both non-verbal reasoning and phonemic awareness. Such pre-existing correlations suggest similarities in auditory and visual pattern recognition as well a sharing of the neural substrates for language and music processing. This baseline study lays the groundwork for an ongoing longitudinal study addressing the effects of intensive musical training on brain and cognitive development, and making it possible to look retroactively at the brain and cognitive development of those children who emerge showing exceptional musical talent (Brain & Cognition, 2005).

Rajam Shankar (2004) conducted a study on 12-15 autistic children to assess the effectiveness of carnatic music with the help of medical and para medical group in a hospital for a month, used different ragas for experimentation. It was found that carnatic music helped in improving attention and in calming down extreme excitement among autistic children and also she found that carnatic music helped in developing communication skills of a non verbal autistic child.
Prema, K.S., Savithri and others (2004) conducted a pilot study to know the effect of music (Mozart) in facilitating communication among children with autism and keeping the objective of compiling the profiles of children with autism who benefit from training in listening to music. The results of the study revealed that the speech-language, sensory-cognitive, social-behavioral skills of children in the experimental group showed a positive change over a period of 20 days. The study agreed with those of earlier studies Rim land and Edelson (1994) and others reported that positive change in general behavior of children including communication skills.

Delcy Janet, J. and Yathiraj, A. (2002) found that music has positive effect on auditory perceptual skills among children with special needs.

Buday (1995) found that children with autism learned more signs when they were paired with music and speech than when they were taught with music alone or speech alone.

Cohen, Nicki, S. and Masse, Renee (1993) conducted a study to examine the effects of singing instruction and rhythmic instruction on the rate of speech and verbal fluency in persons with neurogenetic communication disorder. Three groups were formed out of 32 subjects; one group was control group, while another worked with rhythm and the last with singing. Progress was measured in intelligible words per minute. Results showed the singing group made the most progress in intelligibility. Both the rhythm and singing groups showed improvement in performance. These two groups also benefited in social awareness, an emotional support system, decreased frustration and alienation (Journal of Music Therapy, 2005).
Cohen, Nicki, S. (1992) conducted a study to know the effect of singing instruction on the speech production of neurologically impaired persons. Eight subjects were grouped in two controlled and experimental groups; the treatment group received the musical intervention for 30 minutes 3 times a week, for three weeks. Pre and post tests were conducted, the results revealed that 67% of the treatment group showed improvement whereas control group did not (Journal of Music Therapy, 2005).

Humpal (1991) found that music has positive effect on language disorders.

Brotons, M. and Koger, S.M. (Psychology Department, Willamette University, Salem, OR 97301, USA, pubmed) in this study, the effects of music therapy were compared to conversational sessions on language functioning in dementia patients. Subjects were assessed for cognitive functioning using the Mini-Mental State Examination (MMSE), and language ability via the Western Aphasia Battery (WAB). Results from 20 participants revealed that music therapy significantly improved performance on both speech content and fluency dimensions of the spontaneous speech subscale of the WAB (p =.01). While the difference in overall Aphasia Quotient (AQ) for music and conversation sessions (mean AQ = 76 vs. 70, respectively) did not reach statistical significance, data were only available for 10 participants (5 per condition).

Sigafoos, Green, and others (2009) conducted a study to review communication intervention studies involving people with Rett syndrome. Systematic searches of five electronic databases, selected journals, and reference lists identified nine studies meeting the inclusion criteria. These studies were evaluated in terms of: (a) participant characteristics, (b) target skills,
(c) procedures, (d) main findings, and (e) certainty of evidence. Across the nine studies, intervention was provided to a total of 31 participants aged 2:7. Communication modes included speech, gestures, communication boards, and computer-based systems. Targeted communication functions included imitative speech, requesting, naming/commenting, and various receptive language skills (e.g., respond to requests, answer questions, receptively identify symbols). Intervention approaches included early intensive behavioral intervention, systematic instruction, and music therapy. Positive outcomes were reported for 26 (84%) of the 31 participants (Research in Autism Spectrum Disorders, 2008).

The above studies were conducted in different areas of research i.e. language education, communication, brain research and these studies utilized music therapy techniques. Most of the studies showed that music therapy techniques are useful.

Hence the present study is deviated from above studies in selection of sample, variables, design and strategy as whole and focused on listening and reading competencies on 5th standard Kannada speaking students from Kannada medium schools.

2.5 STUDIES ON KANNADA LANGUAGES

In this section studies have been done in Kannada language. Studies on orthographic rules, reading problems, morphemes, phonological studies on Kannada Language were given.

Purushothama, G. (1986) conducted a study to differentiate the good and poor reading in Kannada children on the bases of the factors of automaticity, rules of orthography, and sequential processing. Subjects for the study were two groups
of grade III children (10 good achievers and 10 poor achievers) aged eight years. The subjects were tested for automaticity in reading (words and syllables exposed for one half a second) and reading at their own pace and tested on sequential processing. The poor readers scored significantly less in reading words using orthography rules, syllables with orthographic rules and words of alphabet letters. The relationship between reading and sequential processing was not significant for either group. The relationship found between reading and simultaneous processing was not consistent. Good reading was correlated with automaticity in reading as well as the knowledge of the rules of orthography but not with sequential processing. It is suggested that the factor of automaticity and the knowledge of the rules of orthography can be used in differentiating good and poor readers of Kannada. The investigator prepared Kannada language testing tools which are suitable for 3rd standard students of Kannada medium to differentiate the good and poor readers, as no intervention provided for poor readers as it is not experimental study. Prema, K.S. (1997) conducted a study aiming at profiling acquisition of reading skills, in children learning to read Kannada which has a semi syllabic script, with the objectives of developing a profile for acquisition of reading and writing, delineating the specifics of reading with respect to the orthographic features of Kannada, identifying predictors of reading ability and identifying reading disabled children. A cross-sectional population of 150 children from 3rd to 7th standard studying in Kannada medium was selected from three different schools of Mysore city. The data obtained was analyzed quantitatively. The results indicated the pattern of various reading skills across primary (grade-III and IV) and higher primary (grade-V, VI and VII) grades. The reading profiles helped in
identification of reading disabled children. The study again the related to identifying the reading disabled children of 3rd to 7th standard students of Kannada medium students.

Nag, S. and Snowling (2007) conducted research on Kannada reading difficulties. The children taken for the study group are from Government Kannada medium schools. They are from 3rd to 6th standard and aged 8 to 12 years. Though the students are Kannada speakers, they showed difficulty in reading speed, syllable processing, phoneme processing, accuracy, spelling, reading comprehension, visual sequential memory and rapid automatic naming. Based on the findings from the study they suggested the following areas be included in any assessment battery aiming at identifying reading difficulties in the akshara knowledge, reading accuracy, reading comprehension, spelling, syllable processing, Oral language processing, reading speed, phoneme processing, speed of processing, visual sequential processing. The study suggested that there urgent need to develop the remedial programme and assessing of akshara knowledge, reading accuracy, reading comprehension, spelling, syllable processing, Oral language processing, reading speed, phoneme processing, speed of processing, visual sequential processing. The study also emphasized the need of attractive strategies and methods to teach the aspects of Kannada language. Nag S (2006) conducted study on 5-10-years-olds on acquisition of Kannada aksharas. It was hypothesized that in Kannada, when compared with the developmental pace reported in English early reading, Akshara knowledge acquisition would take longer and phoneme awareness would be slower to emerge. The study found these hypotheses were true across grades, both low achieving and effective schools. She
has emphasized on teaching methods of teaching reading should be. Ramaa, S. (1993) conducted a study in Mysore on the diagnosis and remediation of dyslexia. The main findings were that dyslexics were differentiated from normal readers only by 4 out of the 10 variables selected for the study, these being auditory sequential memory, visual verbal association, word analysis and word synthesis. Dyslexics however differ from non-dyslexic poor readers only in visual verbal association and word analysis. Interestingly, a large number of normal readers were found deficient in visual processing skills when compared to the two groups of poor readers. Auditory processing skills were found to be relatively more deficient in both dyslexic as well as non dyslexic poor readers leading to the surmise that reading retardation cannot be attributed to poor educational background alone. The most retarded groups were deficient in visual verbal association which seemed to be the most predominant factor in learning reading.

Srimani (1998) studied 68 children of grades III and IV with language disabilities in the Kannada language on the following components of language, namely, auditory reception, receptive vocabulary, phonology, syntax (receptive and expressive), semantics (receptive and expressive) auditory comprehension and verbal expression. Tests were administered individually to all of them. The tests were in Kannada language. They revealed that children with language disabilities had difficulty in all these areas in varying degrees. Systematic, remedial attempts were found to improve their skills. Prakash and Sunita (1998) compared 16 dyslexics and 21 normal readers in the Kannada language on various tasks such as rhyme recognition, phoneme oddity, phoneme deletion, syllable deletion, syllable reversal, a serial (sequential) recall test, identification of body parts and repeating
knowledge of orthographic principles. They found that dyslexics performed worse on most of the tasks than did either of the groups.

Manjula, P., Prakash, P. and Ashalatha, K.V. (2008) conducted a study to know the impact of intervention on the parents participation in education of children with reading and writing difficulties was studied in schools of Dharwad city. 418 students of 6th grade served as sample, the results showed that parental involvement significantly improved the experimental children to achieve better in schools than children of control parents.

The reviews revealed that studies have been done in the area of special education in identifying the students with difficulties in reading and other orthographic rules. But there are scarcities of studies in language teaching and learning. Reviews also revealed that there is too much scarcity in Doctoral especially experimental studies in Kannada teaching and learning for primary school students and no studies have been done on Music and Kannada language teaching.

2.6 CONCLUSION

After overall observations in reviews, no studies in Kannada language attempted to develop a motivating language teaching strategy for primary school students. Researcher found no research used music as teaching strategy, i.e. integrating with curriculum.