CHAPTER II

REVIEW OF RELATED LITERATURE
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Review of related literature is an essential part of any research project. According to Mouly 'the review of the related literature promotes a greater understanding of the problem and its crucial aspects and ensures the avoidance of unnecessary duplication.' He adds that 'it also provides comparative data on the basis of which to evaluate and interpret the significance of one's findings. In addition, it contributes to the scholarship of the investigator.'

Like music education, research in music education in our system has been totally neglected. A beginning has been made in Kerala University where four studies have so far been conducted at Masters' level. Aspects of comparative music have been analysed by several people. Voice culture in a comparative setting has been analysed by Dr. Durga and Dr. Premlathapuri. Prof. Sambamoorthy

2. Ibid., p.112.
has brought out several comparative insights in his works. But comparative analysis as related to modern developments in music education is yet to be done in India. In the developed systems of education a considerable body of research on music education appears to exist. A selective sample of such research available to the investigator has been reviewed in addition to the few available studies in India.

A number of studies have been conducted on the psychology of music and music education, particularly in the field growth and development.

The works of Carl Seashore¹ (The Psychology of Musical Talent) (1919) and Schoen (The Psychology of Music) (1946) were based on the conception that the musical ability consisted of a variety of traits. The traits most commonly proposed were identified by Whybruo (1962) as (1) perception of small differences in pitch, (2) recognition and retention of melodies and chords, (3) absolute pitch, (4) interval discrimination (5) rhythmic sensitivity, (6) perception of specific pitches in chords and (7) discrimination in degrees of consonance.

Graves\(^1\) found out through a study on adolescents musical training that adolescents taking private music lessons showed less emotional conflict and appeared to be better adjusted than adolescents of the same intelligence and socio-economic status who were not involved in private study. Hughes\(^2\) (1955) in his "Fifty-nine case studies on the effect of musical participation on social development" has suggested that the social adjustment of music students appears to be closely related to the extent of participation in musical activities.

The synthesis of the summary of the early literature on musical development by Jersild (1939) and other reports by Mursell (1937) and Glenn (1938), Schoen (1940) and Lundin (1953)\(^3\) presents the developmental gradients or sequential stages in the growth of musical behaviours, an average occurrence in all children. The one-year old child appears to 'respond to music and likes simple repetitive rhythmical sounds. He tends to imitate sounds at approximately forty weeks. The two year old child listens and dances, to music, repeats 'singing' sentences and sings phrases of songs which are generally not on

pitch. He uses his whole body in running, galloping, or swinging to music. First attempts at matching simple tones occur during the third year. A child at this age can recognise several melodies, and he may have definite favourites. He gallops, jumps, and runs in time to music. The four-year-old child likes to experiment at the piano. He may be able to sing some songs correctly and identify simple melodies. At five years of age he may be able to pick out times on the piano and learn to play a few familiar, simple melodies. He also may be able to sing accurately the tones from middle C to the second F above on the treble staff. It appears however, that the preschool child apparently grasps tonal relationships as a general mass impression, and reproduction of melody, tone for tone, is most difficult for him. The child of six, likes radio programs accompanied by music, and is able to keep better time to music when dancing. He appears to have no consistent preference for dissonant or consonant harmonies. At seven he may desire piano or dancing lessons and enjoys using various percussion (rhythm) instruments. As yet he has not developed a keen awareness for harmony and seemingly is not disturbed by dissonant sounds. The eight year old child has less desire to practice on the piano and he likes to change a passage to
one of his own invention. He likes audiences and likes to play music with others. At the ninth year he begins to apply himself in practicing music. He enjoys executing legato or staccato notes and begins to become interested in composers. A definite preference for concords begins to appear at this age. It appears that improvements in pitch perception during these years is related to increase in attention span and improvement of memory function.

Developmental growth patterns in music have not been studied extensively in children over 10 years of age. The information available indicates that 10 and 11 year old children find discords less pleasing, but at ages 12 and 13 interval preferences are similar to those of adults. Marked improvement in melodic memory seems to occur at ages 13 and 14. Children at these ages apparently conceive of melody and rhythm as a totality, not as separate elements.\(^1\)

Pflederer reports in his work\(^2\) on the responses of children to musical tasks embodying Piaget's principle of conservation. He shows that the third-grade children were better able to conserve metre and tonal and rhythmic

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1. Ibid., p. 397.
2. Ibid., p. 397.
patterns than Kindergarten children were.

Petzold in his work "The development of auditory perception of musical sounds by children in the first six grades" suggests that the development of musical perception is related to grade level and musical training and experience.

Boardman in "An investigation of the effect of preschool training on the development of vocal accuracy in young children" found no significant superiority in the singing accuracy of children participating in a preschool vocal-skill program."

Reynolds in his study on "Environmental sources of musical awakening in preschool children," reports a direct relationship between accurate singing at the Kindergarten level and singing and piano playing of the mother in the home; availability of children's records, and a home atmosphere encouraging musical expression.

Kirkpatrick in his study "Relationships between the singing ability of pre-Kindergarten children and the home environment" states the strong relationship between singing ability and socio-economic status of the home-culturally advantaged and the culturally barren.

1. Ibid., p.397. 2. Ibid., p.398.
3. Ibid., p.397. 4. Ibid., p.398.
Hartzell's\(^1\) study on Tonality apprehension and tonal memory in young children shows that only children with superior ability in tonal apprehension and memory in the primary grades show regular growth of accuracy in singing. Growth in singing ability appears quite sporadic in other children.

Studies on materials in music education in schools were also conducted. 'A study of the musical configurations, symbols, terms and words found in Basic music text at the fourth grade level'\(^2\) was conducted by Smiley to determine the type, amount and use of musical configuration.

Blyler's\(^3\) study on song choices of children in the elementary school, reveals that they contained strong melodic movement, well defined cadences ending on the tonic major modes, primarily chordal backgrounds and dynamic variations.

Podolski\(^4\) has outlined his observations of people's

2. In \textit{ibid}., p.899.
responses to the stimulus of music. He has found that these responses fall into three general categories which indicates that music can be an expressive medium for all kinds of personalities.

Loretta Bender \(^1\) states that from the results of her own research she is convinced that music stirs both the conscious and the sub-conscious areas of the mind, whereas other subjects do not. This and much other evidence suggests that music and movement are essential to the optimum development of the senses through sensorimotor (active experience), and of the personality through socio-emotional (interactive) experience. The totality of all of these aspects form the growing intelligence. Music then is a functional art and as such it has a functional role in education.

A study carried out by Steele and Jorgenson \(^2\) in 1971 shows that music could be a potential reinforcer for a variety of behaviour in many different situations.

Sir Charles Mcdonald, Chancellor of the University of Sydney, Australia and a distinguished physician in an opening address to the 1965 Australian UNESCO Seminar on

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School Music, pointed out 'that the memory of music is stored up in both sides of the brain, and that scientists believe that in the main, the memory of ordinary spoken words has a unilateral representation in the brain, and people who are right handed are left-brained so far as speech is concerned. And therefore, if there is a very extensive haemorrhage or thrombosis occurring in the left half of the brain of a right handed man, and he becomes paralysed down the right side - face, arm and leg - he often, if the lesion is big enough, loses the power of speech. But curiously, because music has a bi-lateral representation in the brain, he preserves very often, the memory of music.'

Music has been used in order to modify one's behaviour. Cotazzi conducted a study on the effect of music on the behavioural problems of 12 female adults with IQ below 25. Her attempt was at reinstating these subjects in the normal hospital setting. The subjects participated in music activities for an hour per day for 9 months after which the introducing of primary school activities followed. At the end of four

years 4 subjects proved to be complete failures while 4 subjects integrated successfully in an occupational therapy unit as full-time members of the hospital. Four subjects though requiring attention, were

(a) able to accept relationship with some equanimity,
(b) beginning to learn from each other and
(c) showing an increase in concentration.

Shull's study on children's song literature written by distinguished nineteenth and twentieth century composers proves that most compositions were not considered appropriate because of pitch range requirements, extended periods in high or low tessituras, and the use of fragmentary melodies.

Analysis of content of various types of music and teaching methods also have been receiving attention by investigators. For example Utgaard (1949) conducted an analysis of the teaching content (music) found in ensemble music for brass wind instruments in his study "Analysis of teaching content found in Ensemble Music written for Brass wind instruments. Evans examined the available method books for Oboe from 1965 to about 1800, to determine the pedagogical principles and the type of

music used in early Oboe instruction in his study "Instructional materials for the Oboe," in 1963.

Petzold's\(^1\) study, on musical perceptions of boys and girls of elementary school age, shows that boys and girls in the first six grades perceive the general shape of the tonal configuration but that specific intervals within the pattern may not be perceived. The study also indicates that skill in aural perception can be developed only if the child is able to 'hear' the item before he sings it and that accurate reading is more likely to result when greater emphasis is placed upon understanding the significance of the notation rather than upon a mere 'imitation' of musical sounds.

Hammer's\(^2\) study on approach to music discloses that tachistoscopic training in melodic sight singing appeared to be more effective than conventional techniques.

Bennett's\(^3\) investigation shows the multi-sensory responses of children to symbolising musical sound through speech rhythm patterns.


A study "An exploratory study of children's multi-sensory responses to symbolising musical sound through speech rhythm patterns" was conducted by Bennett Peggy Dee in North Texas State University in 1981 to investigate the multisensory responses of children to symbolizing musical sound through speech rhythm patterns. The research problems were (1) to determine children's responses to speech rhythm patterns according to the differential sensory modes used (2) to determine the children's responses to speech rhythm patterns by age and (3) to compare children's responses to speech rhythm patterns by age and sensory modes.

In the experiment three groups of six, five, seven and nine year old children respectively were observed in their use of speech rhythm pattern symbolization through visual, Kinesthetic and lingual means. All groups met for four weeks in daily thirty minutes music classes which consisted of song-game activities that focussed on the work with speech rhythm patterns. Each session was video taped and through tapes and the transcripts of the lessons, children's responses were subjected to a quantitative and qualitative analysis.

The study showed that individual and age difference did exist in the frequency, accuracy and function with
which the three sense modes were used. The Kinesthetic mode was the mode most frequently used by each age, but was generally inaccurate as a response mode for the five year olds. The visual mode indicated an obvious difference between the children's abilities to make visual symbol for the sound pattern and their ability to follow a prepared visual symbol. The lingual mode showed less difference between age groups than the other two modes and was the most accurate mode of response for the five year olds. Due to individual difference among children, it was concluded that a multi sensory approach to symbolising sound patterns might be more feasible teaching and learning tool than a single mode approach.  

Jones Barbara Ann's study on spatial reinforcement was based on the purpose of comparing two instructional methodologies designed to improve the pitch discrimination of children. The study compared two instructional methodologies designed to improve the pitch discrimination of children. Specifically the investigator sought to determine whether spatially reinforced remedies for uncertain singers were more effective than nonspatially


reinforced remedies.

Students taking part in the study were residents of Weadly, a rural area in the northwestern part of Tennessee. The research sample included all second grade students attending school in Martin, Tennessee, who were seven years of age on or before October 30, 1980.

Five intact classrooms participated in the study which was based on the quasi-experimental approach known as the non-equivalent control group design. A total of 94 students took part in the study, 58 students in the experimental group, and 36 students in the control group.

Following the pretest, a six-week instructional module designed to provide sequential experiences for developing pitch awareness was presented to each group. Instruction was given on a daily basis for twenty minutes. Both groups were taught identical songs and participated in identical activities.

The essential difference between the groups lay in the fact that the experimental group was encouraged to be physically involved with all activities which spatially reinforced pitch. Children in the experimental group were instructed and encouraged to use the Curwen hand signals when they sang simple melodic patterns.
Physical indicators such as body movements, line levels and left to right movements on melodic instruments were also included for this group. Students in the control group did not physically explore or indicate pitch changes with their bodies.

A one-way analysis of variance and an independent t-test established that the two groups were equivalent in pitch discrimination prior to treatment. Correlated t-test were then applied to the pretest and posttest scores of the experimental group and the control group, respectively. The obtained t-ratio for each group was highly significant indicating that both groups had improved in pitch discrimination.

A one-way analysis of variance and an independent t-test were then applied to the post-test scores of both groups to determine whether one methodology was more effective than the other. Although students responding to spatially reinforced remedies for uncertain singers achieved an advantage over students who worked with non-spatially reinforced remedies, no significant statistical difference was found between the two groups at the post-test level.

Based on the findings generated by this study inferences were made regarding the feasibility of the
training, the receptiveness of the age group and the response mode of the research subject.

The Centre International d'Etudes Pedagogiques has conducted several interdisciplinary studies in music. Aime Janicot conducted an experiment relating music with drawing and painting. Some pictures were projected and extracts of music from Debussy, de Ravel and others were also played. The children were asked to recall the type of visual imagery evoked by the different types of music. Precise results are not reported in the publication, beyond saying that the discussions were very passionate in the context of the pictures and the music.

Wolffin and Walzel presented suitable study material which gave new impetus to art educators, trying to explore the "Mutual enlightenment of the arts." (Wechselseitige Erhellung der kunste). Since these scholars derived their definitions from architecture and poetry, the music educators had great difficulties in transferring them to music. Finally the adherents of 'related arts education simplified what originally were


intended as complex approaches. The approaches in the old concept of humanities and related art education can be traced back to three different aspects.

1. The thematic approach: Themes like love, hatred, peace, war, social protest, are demonstrated by works of different arts. These works are chosen mainly to illustrate philosophical ideas or general human feelings.

2. The chronological approach: The historic development of various subject areas are examined simultaneously. This approach attempts to show relationship between art, music, literature and history of a particular period. It implies that the characteristics of the subject areas in any one time or style period are the same.

3. The common elements approach: The relationships of the basic elements of the arts are examined (line, colour, density etc.)

The far reaching effects of the impact of high level experts in the discipline of music on young children, introducing children to the structure of the discipline at an early age has been demonstrated by Kabalevsky.
Dmitry Kabalevsky conducted an experimental programme in twenty-five schools in the U.S.S.R. with experienced teachers. The author does not give the details of the programme, but he mentions the most important findings of the experiment, that first children are capable of deeper understanding of music than is usually thought. He found that by the middle of the first year his seven year old pupils not only listened with attention and pleasure to such pieces as 'Merry sad' by Beethoven, but could also seriously reflect on this music and analyse its structure and image contents. In the last term they sang the songs that were in the traditional programme for the third class, and the year was ended by an emotionally fascinating and intelligent listening to the symphonic fairy tale by Prokofiev, 'Peter and the Wolf, which is in the programme for the fourth form. The children's ability to assimilate music not only emotionally but also analytically was found to progress rapidly. Having listened in the middle of the year to two marches unknown to them before (from Nutcracker by Tchaikovsky and Carmen by Bizet) they said, without hesitation and almost unanimously, that the first march was from ballet, and the second one from opera. One

One pupil was able to say that the first march needs to be danced, the second to be sung.

Kabalevsky conducted an experiment to test the principle that 'Music at School is not limited to its aesthetic functions.' He believes that "like literature and the visual arts, music resolutely makes its way into all spheres of education, for it is a uniquely strong medium for shaping the spiritual world of school children." Based on such principles, a new programme of music instruction was held in 1973-74 in about fifty general schools in various parts of USSR and it has been proved that the general school children showed rapid progress even at the end of first year than the children who are trained traditionally.

Apart from Sukumaran Nair's study on preparation of a musical aptitude study for Carnatic music there are three other studies conducted at Masters' level at the Kerala University Department of Education. Apart from these and one study by Suri and Suri (on the psychometric dimension) there is not much indication of research in this area in India.

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1. In ibid., p.127.
Suri and Suri\(^1\) studied the musical discrimination of school-going children in relation to cognitive and non-cognitive variables. The objectives drawn were:

1. to determine the degree of relationship of musical discrimination with intelligence, personality factors and musical preference.

2. to have an equation at hand to know the discrimination power of an individual. The sample included 200 students studying in VIII and X classes of five high and higher secondary schools of the urban areas of Jammu district. It has been established that the individual possessing musical ability which is a constituent of intelligence can better grasp and can discriminate the basic concepts of rhythm, pitch, harmony, notes, phrase and sequence etc. Personality patterns have not been recognised as the sole base for musical discrimination and musical preference.

Chandrakumari\(^2\) conducted a study on the potentials of Music for the Enrichment of Hindi Education. It reveals that it is possible to teach pupils Hindi language and (master the language) through listening

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to simple songs in Hindi, and Hindi film songs. It seems that Hindi film songs have a strong influence on popularising Hindi language. The students not only like Hindi songs but also show a favourable attitude towards that language.

Venugopu\(^1\) conducted a study on the task analysis of certain teaching learning situation in music. In addition to analysing the conceptual difficulties in understanding the Carnatic raga system many of the difficulties that face beginners in playing flute have been analysed in this study. An easy method of attaining mastery over fingerling by using the six holes closed note as Sruti has been developed. This also helps in teaching some elementary physics that the pitch increases inversely with the length of the air column vibrating.

Idikula\(^2\) conducted a task analysis of some violin schools. He made an elementary analysis of the Western schools of Honeymann, Spohr and Tours. He also analysed one North Indian school and included a very elementary analysis of Carnatic styles of playing.

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