Copyright and use of this thesis
This thesis must be used in accordance with the provisions of the Copyright Act 1968.

Reproduction of material protected by copyright may be an infringement of copyright and copyright owners may be entitled to take legal action against persons who infringe their copyright.

Section 51 (2) of the Copyright Act permits an authorized officer of a university library or archives to provide a copy (by communication or otherwise) of an unpublished thesis kept in the library or archives, to a person who satisfies the authorized officer that he or she requires the reproduction for the purposes of research or study.

The Copyright Act grants the creator of a work a number of moral rights, specifically the right of attribution, the right against false attribution and the right of integrity.

You may infringe the author's moral rights if you:
- fail to acknowledge the author of this thesis if you quote sections from the work
- attribute this thesis to another author
- subject this thesis to derogatory treatment which may prejudice the author's reputation

For further information contact the University's Copyright Service.
sydney.edu.au/copyright
A STUDY OF THE MUSIC PREFERENCES
OF PRESCHOOL CHILDREN: AN EXAMINATION OF
THE EFFECTS OF THE LEARNING ENVIRONMENT ON
THE EXTENSION OF LISTENING PARAMETERS.

by

Margaret Priest-Smith

B.Ed.

A thesis submitted
to the Division of Music Education
of the University of Sydney Conservatorium of Music
in partial fulfilment of the requirements for
the degree of Master of Music (Music Education)
1993
ABSTRACT

The study was designed to examine the factors which influence the music piece preference of preschool children. Sixty one children aged from 26 to 60 months from six daycare centres participated in the study and indicated a preference for one of three pieces of music of different styles. The styles included traditional children's music, popular music and art music.

The children indicated their preference by selecting from three cassette players containing recorded examples of the music used in the preparation program. Illustrations used in the program identified each cassette. This selection procedure was video recorded and submitted for validation to three independent observers.

Many factors contribute to music preference, including the age of the listener, repetition of the listening material, styles of teaching, and characteristics inherent in the music. The results of this study suggest that teaching style plays an important role in influencing music preference of preschool children.
ACKNOWLEDGEMENTS.

I am indebted to many people whose kindness and assistance contributed significantly to the completion of this work. To my supervisor, Mr Neal Winter, for his expert guidance, patience and encouragement during this project.

To Dr. Leonard Burtenshaw and his colleagues in the Division of Music Education at the University of Sydney Conservatorium of Music for their teaching and encouragement. To Dr. Ron Brooker for his assistance with the statistics for the study.

To Leanne Jakins, co-ordinator of the Gosford City Council Child Care Centres for permission to conduct the study in her centres, and to the directors and staff of these centres.

To the director, Judith Anderson, and her staff at the Gosford Community Child Care Centre for their interest and co-operation in the project.

I am most grateful to my husband and family, whose unfailing support and encouragement made this project possible.
The author would like to acknowledge:—

(a) the participating teachers for study 1.

<table>
<thead>
<tr>
<th>Judith Anderson</th>
<th>Barbara Hobbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samantha Birch</td>
<td>Debbie Pring</td>
</tr>
<tr>
<td>Liza Dennehy</td>
<td>Michelle Owen</td>
</tr>
<tr>
<td>Lesley Lodge–Devine</td>
<td>Diane Stephenson</td>
</tr>
</tbody>
</table>

(b) the participating teachers in study 2.

<table>
<thead>
<tr>
<th>Veronica Anderson</th>
<th>Jeff Haydon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debbie Andrews</td>
<td>Bronwyn Helson</td>
</tr>
<tr>
<td>Barbara Baumback</td>
<td>Marion Hine</td>
</tr>
<tr>
<td>Sandra Beadle</td>
<td>Karen Jenkins</td>
</tr>
<tr>
<td>Lorraine Bolcina</td>
<td>Pam Kamphius</td>
</tr>
<tr>
<td>Suellen Boyd</td>
<td>Denise Kemp</td>
</tr>
<tr>
<td>Karin Burgess</td>
<td>Edith Kennedy</td>
</tr>
<tr>
<td>Vicki Carmichael</td>
<td>Ron Koot</td>
</tr>
<tr>
<td>Heather Clissold</td>
<td>Gaye Martin</td>
</tr>
<tr>
<td>Lynn Day</td>
<td>Kerry Mylecharan</td>
</tr>
<tr>
<td>Michelle Dowrick</td>
<td>Dorothy Nelson</td>
</tr>
<tr>
<td>Vicki Ford</td>
<td>Sue Newman</td>
</tr>
<tr>
<td>Kim Freckleton</td>
<td>Lynn O’Donnell</td>
</tr>
<tr>
<td>Sue French</td>
<td>Lorraine O’Neill</td>
</tr>
<tr>
<td>Kylie Garner</td>
<td>Lesley O’Rourke</td>
</tr>
<tr>
<td>Janelle Gillham</td>
<td>Jan Petrie</td>
</tr>
<tr>
<td>Name</td>
<td>Name</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Jan Portello</td>
<td>Robin Stephenson</td>
</tr>
<tr>
<td>Michelle Quirke</td>
<td>Rose Strutt</td>
</tr>
<tr>
<td>Eileen Roby</td>
<td>Heather Thomas</td>
</tr>
<tr>
<td>Tracey Sell</td>
<td>Melissa Underwood</td>
</tr>
<tr>
<td>Lynn Shepherdson</td>
<td>Jenny Wade</td>
</tr>
<tr>
<td>Jodie Shipway</td>
<td>Barbara Waite</td>
</tr>
<tr>
<td>Robyn Smith</td>
<td>Melissa Underwood</td>
</tr>
<tr>
<td>Pam Solomon</td>
<td>Tori Yarnold</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS

Page

TITLE PAGE (i)
ABSTRACT (ii)
ACKNOWLEDGEMENTS (iii)
LIST OFFigURES (x)
LIST OF TABLES (xi)

Chapter

<table>
<thead>
<tr>
<th>Chapter</th>
<th>INTRODUCTION AND OVERVIEW</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1.1 Introduction</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1.2 Statement of the Problem</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1.3 Significance of the Problem</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1.4 Definition of Terms</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>1.5 Assumptions</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>1.6 Limitations</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>1.7 Delimitations</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter</th>
<th>REVIEW OF RELATED LITERATURE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Introduction</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>2.1 Introduction</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>2.2 Repetition</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>2.3 Age</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>2.4 Social Factors</td>
<td>17</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>2.5 Listening skills</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>2.6 Characteristics of the music</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>2.7 Home environment</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>2.8 A model for preference</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>2.9 Babies and infants</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>2.10 Summary</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>3.1 Introduction</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>3.2 Criteria</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>3.3 Home music environment</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>3.4 Setting</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>3.5 Administration of the study</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>3.6 Selection of music</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>3.7 Equipment</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>3.8 Focus of the study</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>4.1 Introduction</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>4.2 Teacher training</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>4.3 Selection of equipment</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>4.4 Preparation of the children</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>4.5 Administration of preference test</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>4.6 Collection of data</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>4.7 Results of study 1</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>4.8 Summary of study 1</td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>
5 REPORT OF STUDY 2 50
5.1 Introduction 51
5.2 Preliminary procedures 52
5.3 Teaching staff 52
5.4 Treatment groups 53
5.5 Selection of subjects 54
5.6 Planning of lessons 54
5.7 Administration of tests 55
5.8 Data collection 58

6 ANALYSIS OF STUDY 2 RESULTS 60
6.1 Introduction 61
6.2 Influence of age 62
6.3 Repetition 64
6.4 Radio listening 68
6.5 Home environment 72
6.6 Teaching style 75
6.7 Summary 78

7 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 79
7.1 Introduction 80
7.2 Summary of results 81
7.3 Implications of the study 82
7.4 Strengths and limitations of the study 84
7.5 Recommendations for future research

7.6 Conclusion

BIBLIOGRAPHY

APPENDICES

Appendix A  Staff meeting  97
Appendix B  PMBS survey form  104
Appendix C  Covering letter for PMBS  106
Appendix D  Covering letter for home cassette  107
Appendix E  Letter to Directors  108
Appendix F  Lesson procedures  109
Appendix G  Lesson plans  111
LIST OF FIGURES

Figure 4.1 Associated pictures for music used in the study 42

5.1 Associated picture for "Comedians' Gallop' 56
LIST OF TABLES

Table 4.1 Results of study 1 47

5.1 Results of study 2 59

6.1 Age categories in each centre 62

6.2 Preferences of each age group 63

6.3 Repetitions and preferences for 66
    art music

6.4 Preferences of children with frequent 71
    rock radio home listening

6.5 Principal components factor analysis 73
    for home environment supportive to music

6.6 Varimax rotations of principal 74
    components factor analysis

6.7 Preferences of each treatment group 76
Chapter 1

OVERVIEW AND INTRODUCTION
Chapter 1

OVERVIEW AND INTRODUCTION

1.1 Introduction

The music listening preferences of children are known to be established at about the age of six years. Previous studies have shown that these preferences are usually for rock and popular styles of music. Very young children however, appear to enjoy listening to all types of music, but this broad interest begins to decline as the child grows older and absorbs the influences of the daily environment.

The most significant influences that are exerted on the music listening experiences of young children come from parents and care givers. As radio, television, videos and movies provide almost all of the music that is
generally listened to by adults, this also becomes the daily musical fare of the child. In this environment there is little opportunity for children to hear a variety of different music styles.

Adults involved in the daily care of young children make considerable efforts to ensure that children enjoy a variety of experiences during the day. A plentiful selection of manipulative toys and puzzles are provided as well as a good supply of literature on many different topics of interest to children. This care in selecting many varieties of experiences for children does not appear to apply to the selection of music for listening. Adults appear to select music for children from a very narrow range consisting of traditional nursery music or specially composed modern children's songs. Often children hear only the radio station selected by the adult for daily listening. There appear to be few opportunities for young children to hear examples of western art music.

This study attempted to expand the listening preferences of a group of preschool children by introducing an example of art music to a program containing traditional children's music and rock music. Reinforcement from the home environment was sought by
1.2 Statement of the Problem

This study is an attempt to investigate the influences that may affect the music listening preferences of preschool children in two different listening treatment groups. The study examined the place of home environment in the child's music listening development. A classroom listening program containing music of different styles was used in order to discover whether the use of such a program would expand the music listening preferences of preschool children. The music selected for the programme was repeated many times in order to discover the effects of repetition on the listening preferences of preschool children. The effect of active listening was also examined. Finally, the study sought to determine differences in level and type of influence on listening preferences of children of different sexes and aged from 26 to 60 months. The study sought to answer the following questions:-

1. Does home environment and parental approval of a particular music style influence the development of preschool children's musical preferences?
2. Does exposure to an unfamiliar style of music in a class listening program, when presented with a variety of teaching approaches, provide children with a context in which decisions to accept the new style can be made?

3. Does repeated listening to a particular style of music increase preschool children's tendency to favour that style of music?

1.3 Significance of the Problem

This study is significant because although there is an extensive body of research in the area of music preference, few studies have examined the influences that shape the music preferences of preschool children. The approach to the study is significant because it examined the problem in a natural setting, using the children's normal teachers as research assistants, and testing the children in their usual daycare situation.

The study is significant for early childhood teachers because it provides evidence on effective ways in which the parameters of music listening for young children can be expanded.
Finally, the study is significant because it provides parents and teachers with information about the importance of the daily environment in the musical development of children. The music listening strategies used in this study could form part of a future program for a preschool and home based music listening program.

1.4 Definition of Terms

For the purposes of this study, the following terms are defined:-

Preschool child:— refers to a child under the age of sixty months who does not attend a formal school.

Preschool:— refers to settings staffed by qualified personnel that provide care, supervision and educational programs for children from 36 months to 72 months, before the commencement of formal schooling. Preschools operate from 9 am to 3.30 pm during school terms.
Daycare centre: refers to settings staffed by qualified personnel which provide care, supervision and educational programs for children from six months to 72 months. The centres operate from 7am to 6.30pm, each weekday throughout the year. These hours may be altered to comply with community needs.

Home environment: refers to the circumstances in which the child is living and includes the variables of:

a) marital status of parent or parents.
b) number of siblings in the family
c) educational background of parents
d) musical experience of parents
e) occupation of parents
f) employment of parents
g) amount of time spent with child each week day by parents
h) amount of time in which music is played each day in the home
i) type of music most often played
each day in the home.

j) radio and television station most often played in the home.

Age of children:— children in the sample will be between the ages of 26 and 60 months.

Music styles:— refers to distinctive types of music (eg. baroque, contemporary, rock). In this study it refers to traditional children's music, art music and rock music.

Traditional children's music:— refers to nursery songs of the western tradition.

Art music:— refers to serious music composed in a style commonly referred to as 'classical'.

Rock music:— refers to popular musical styles.

Exposure:— refers to the presentation of music to the subjects.

Active listening:— refers to the presentation of music
accompanied by movement, and dancing and involving the use of resources such as costumes and coloured streamers.

Passive listening:— refers to presentation of music for quiet listening with no use of material resources.

1.5 Assumptions

It was assumed that the children in this study were more familiar with traditional children's music and rock music styles than with art music styles.

It was also assumed that the older children in the sample would prefer the rock music and the younger children would prefer the traditional children's music.

Repetition of the unfamiliar music with the use of interesting resources, it was assumed, would cause subjects to like that music.

It was assumed that repetition of the unfamiliar music by parents, in the child's home environment would
reinforce liking for that style.

It was also assumed that an active listening program would reinforce liking for the music more than a passive listening program.

It was assumed that parents who had agreed to participate in the study would provide a supportive listening environment for the children at home.

Frequent listening to radio stations favouring a particular style of music was assumed to cause a preference for that style of music.

Finally, it was assumed that the children would be able to manipulate the simple sound equipment provided.

1.6 Limitations

The limitations placed on this study include the fact that only three styles of music were used. These styles represented only music from the western tonal tradition.

There were a limited number of participants in this study involving 61 preschool children.
1.7 Delimitations

This study was only concerned with the process of investigating the music preference behaviour of the participating children. This involved a selection of only three styles of music from the western tonal tradition.

The study was only concerned with examining data relating to the musical interest of the children. This data was obtained from the daycare centre and the participating parents. No information was sought on the subjects' socio-economic background.

Finally, the study was only concerned with the implications for parents and teachers involved in the education of preschool children and engaged in developing music programs to provide children with a broad variety of music experiences.
Chapter 2

REVIEW OF RELATED LITERATURE
Chapter 2

REVIEW OF RELATED LITERATURE

2.1 Introduction

The literature concerned with children's musical preferences has been examined in relation to this study. The review is divided into eight sections and refers to previous research in the areas of (1) repetition, (2) listeners' age, (3) social factors, such as adult approval, (4) the listening and discrimination skills of the listener, (5) characteristics of the music and (6) home environment in musical development. A model of the interactive influences on musical preference is discussed (7) and research on musical preference in babies and infants is also reviewed (8).
2.2 Repetition

The influence of repetition on students' preference for selected music was studied by Getz (1966) and Bradley (1971). Getz chose a selection of five pieces for string orchestra which he played to his high school students eleven times during the experiment. There was a significant increase in the students' expressed liking for the music between the first hearing and the sixth to eighth hearings. After this, extra listening appeared to cause a decline in liking for the music. During this study, Getz also discovered that his subjects reacted favourably to music which contained elements already liked in previously familiar music. These elements were:—fast tempo, dynamic variety, driving rhythms and melodic repeats. His students expressed dislike for music with very loud dynamic levels, jumpy melodies, dissonance and minor modes. Bradley (1971) found that the simple strategy of repeating twelve twentieth century pieces of art music three times to his high school students during the fourteen week term caused significant gains in their expressed preferences.

Schuckert and McDonald (1968) investigated the musical preferences of a group of twenty preschool children
from 4 to 6 years of age. The children were pre and post tested for preference between two pieces of music, one, an example of art music and the other, an example of popular music. For the next four days, the children were played the less preferred music for five minutes as they engaged in play activities. At the post test fifty percent of the children changed to the previously less preferred piece. This is not regarded as a statistically significant shift in preference, but does indicate that a treatment period longer than four days may have produced more significant results.

Peery and Peery (1986) investigated the effects of repetition and social reinforcement on the development of musical preference in preschool children. Forty five children were studied in a pre-test, post-test experimental design on preference for a range of music works using a type of Likert scale which used five varieties of facial expressions. The experimental group received a weekly music lesson for ten months which used art music and focused on a variety of enjoyable associated activities with positive reinforcement responses. The pre-test found that at 4.5 years of age, children liked all kinds of music. The post test showed that at 5 years of age the children in the treatment group retained their enjoyment of all kinds of music while the children in
the control group had begun to show a preference for popular music.

These studies suggest that repetition is an important factor in influencing children's music preferences. Preschool children participating in listening programs involving repetition of unfamiliar music, appear to exhibit similar preference behaviour to older children in the post test situation.

2.3 Age

Greer, Dorrow and Randall (1974) investigated the musical preferences of primary school children to discover whether at this age, there is a preference for rock or non rock music. No preference for rock or non rock music was found in preschool and first grade children. Third and fourth grade appeared to be a turning point for musical taste, with subjects beginning to show a preference for rock styles. It was found that as children get older and their liking for rock music increases, they are less amenable to listening to non rock music. This may be due to school related variables.
May's study (1985) found that children's liking for art music declines with age. He notes that children's music preferences have begun to be influenced long before the child commences school. The study shows that music preferences depend partly upon environmental factors in early childhood, as do musical skills and abilities. By the time children reach first grade, their musical taste is already beginning to narrow to a preference for listening only to popular music. May suggests the creation of a curriculum strategy for use with very young children which would attempt to sustain the broad range of musical style preferences common in early childhood.

2.4 Social factors: Adult Approval

Greer, Dorrow and Hanser (1973) studied 3 year old preschool children in an experiment to determine the effect of training and adult approval on the children's music selections. The subjects were trained in pairs. One subject received discrimination training which consisted of learning to match pictures of instruments with the appropriate symphonic music. The second subject listened to the same music but engaged in non
music related activities such as colouring pictures, or playing with clay. Both subjects received the same number of adult verbal approvals for their behaviour. The post test allowed the children to select from symphonic music, rock music or white noise by depressing keys on an episodic reinforcement device connected to headphones. Depression of a particular key for more than one minute resulted in the relocation of the music. In order to continue to hear the chosen music, subjects had to discover the music's new key location. The post test results show a difference between the two groups approaching significance with the discrimination group increasing symphonic listening and overall music listening time. The researchers state their belief that high teacher approval is the most influential instructional variable causing increased listening time.

Dorrow's 1977 study used five lessons concerned with piano music with fourth and fifth grade students, to provide high adult approval to one group of students. A second group's responses received approval only 20 percent of the time. At the post test, the subjects who had received a high teacher approval rate elected to listen to more piano music. Students who listened to music accompanied by low approval showed no increase in time spent listening.
Greer, Dorow, Wachhaus and White (1973) also found that fifth grade students who listened to jazz, electronic music and art music under conditions of high adult approval continued to choose those pieces in the post test. Students from the low approval group mostly chose to listen to the rock music.

Sims' experiment (1985) involved preschool children from three to five years old and provided evidence that these children were more attentive during music listening activities when the teacher exhibited high non-verbal approval and when they were using hand movements while listening. Unlike the study of Greer, Dorow, Wachhaus and White, Sims' found that teacher behaviour did not appear to influence later preferences and piece recognition, but as this experiment took only four days, further work over a longer period is required before conclusions can be drawn on this topic. The evidence from this study does show however, that young children are capable of higher levels of cognitive and affective response than has previously been thought possible.
2.5 Listening and Discrimination Skills

The ability to listen and attend to the music is an essential skill in developing the discrimination abilities which may influence the formation of preferences. Hufstader (1977) investigated the possible existence of a learning sequence in the development of these skills. A measurement instrument was devised by the researcher to test children's ability to detect alterations in timbre, melodic pitch patterns, rhythmic patterns and harmony and to discover the ages at which these skills emerge. It was found that perception of timbre is the first to develop and is well in evidence in children of preschool age. Rhythmic perception skills are the next to emerge and are well developed by fifth grade. Melodic and pitch patterning skills are present in fifth and sixth grade with perception of harmony and harmonic changes emerging at a much later stage.

Gardner (1973) studied children's abilities to recognise stylistic differences in music. Groups of children aged 6, 8, 11, and 18 years were tested. Music selections were from the baroque, classical, romantic and modern eras covering the years from 1680 to 1960. The subjects heard 15 seconds of music followed by a bell. A second selection of music then
followed, sometimes from the same work and sometimes from a different work. Students were required to state whether the two halves were from the same piece and to give reasons for their decision. Older students did well in the tests and Gardner reports that even the youngest children were able to make reasonable judgements about musical styles.

2.6 Characteristics of the Music

Leblanc (1981) studied the effects of style, performing medium and tempo on the musical preferences of fifth grade children. He found that musical style is the most important factor in determining children's musical preferences. In this study, the order of the subjects' preferred styles was: rock music, country and western, marching band music, new jazz, traditional jazz and Western art music. The children showed a preference for fast music and liked instrumental music better than vocal music. There was an expressed dislike for vocal music in a foreign language. Leblanc suggests that teachers wishing to encourage favourable student response to unfamiliar music, should begin with music containing elements already liked by the students.
2.7 **Home Environment**

McDonald (1974) examined the effect of home environment as a factor influencing the ability of elementary school children to identify selected music concepts through aural experiences with orchestral music. McDonald discovered that the socially advantaged children fourth grade children in the study scored higher than the disadvantaged children in the same grade. She concluded that greater language fluency and more experience in dealing with abstract tasks in the advantaged group contributed to their success. The advantaged group also probably had home exposure to the type of orchestral music used in the tests. Appropriate materials and methods could be developed in order to give children opportunities to interact in many different ways with music of many different kinds. Children would also benefit from an environment where verbalising about music was encouraged.

Brand (1985) developed an instrument for assessing the home musical environment. Brand believes that the home background, particularly in the years before the commencement of formal schooling, is of vital importance in the musical development of children. The child's first opportunities to listen to music occur in the home and this may have a considerable effect upon
Andress (1992) discusses the importance of adult involvement in the musical play of young children. She suggests that successful small group music activities with preschool children depend upon the involvement of adults who have an understanding of the developmental level of the children, and are willing to engage in appropriate play. Parents, teachers or caregivers, when interacting musically with young children, should model ideas, describe what is happening and at appropriate times, make suggestions or accept suggestions from the children. This type of interactive behaviour demonstrates a love of music making and a willingness to share and enjoy music. Such behaviour has an important effect on the young child's developing attitudes to music.

The Musictime project at the Eastman School of Music described by Fox (1987) is an attempt to assist adults to recognise and understand the musical behaviour of young children. The project involves adults and children in informal, active musical experiences. Fox believes that such interactive musical experiences should begin as early as possible in the child's life. The age range of the children in this program is 4 months to 25 months. The presence of adults in the
project demonstrates to their children a value of and commitment to music as an important part of life.

Wilkin (1985) has also commented on the decisive role played by parents in the shaping of children's later attitudes to music. The author's music classes for toddlers and their parents were begun in answer to the needs of parents who, while being aware of their responsibilities as their child's first music educator, were unaware or unsure of how to proceed. Wilkin believes that positive attitudes towards music are developed in early childhood and continue to be influential throughout life.

The investigations carried out by Achilles (1992) revealed that children as young as two years of age exhibited preferences for certain pieces of music. In a parent/toddler music program which she observed over a period of eight weeks, parents reported on the music listening pieces requested by their children. The children's preferences were demonstrated by repeated requests for certain music selections. Achilles notes that if music preference is evident at such an early age, parents need to understand the importance of enlarging the repertoire of music listening available to their children beyond the parameters of their own
preferences.

2.8 A Model for Preference

The research of Leblanc and his associates over a period of several years (1979, 1981, 1983, 1988) has led to a proposed model for the development of music preference. It is a comprehensive model in which the researcher has attempted to identify all sources which account for musical preference. The model is arranged in a hierarchy of eight stages. The bottom level consists of variables present in the music itself and in the environment of the listener and the two top levels represent the stages where the personal decision related to musical preference takes place. The middle stages are filters through which the stimulus must pass before the listener variables can act. For example, the listener must have proper hearing and be able to pay attention for processing to continue. The listener's mood then interacts with the variables of the level above it which is concerned with personal characteristics of the listener such as gender, age, musical training and personality. Cognitive processing of the music as perceived by the listener takes place at the next level, which represents a culmination of
all the influences of the previous levels. This model provides a very detailed map of the variables which interact to influence musical preference. The model has been subjected to empirical testing by Leblanc (1981) and Leblanc & Cote (1983).

2.9 Babies and Infants

Ingenious methods have been devised by several researchers to enable very young infants to express preferences for certain sounds and music. De Casper and Fifer (1980) used experimental methods to test newborn babies' responses to sounds heard earlier, in utero. The experiment used a system of non-nutritive nipples connected to tape recorders which when sucked in a certain pattern produced the sound of the mother's voice. The use of a different sucking pattern resulted in the baby hearing the voice of another adult. The results of this experiment showed that the 12 babies in the study preferred the sounds heard prenatally. All sucked in a pattern which produced the sound of their mother's voice. The babies also sucked to produce the sound of the mother reading a poem heard daily in utero, rather than the mother's voice reading a poem not previously heard. The researchers concluded that prenatal auditory experience is sufficient to
influence post natal auditory preference.

A similar study on new born babies by Woodward (1992) used a music excerpt which was repeatedly presented during the interuterine stage. This music was of more reinforcing value in neonatal behaviour than music which had not been heard previously.

Standley and Madsen (1990) investigated sound preference in babies from two to eight months of age. A tape recording was made of the baby's mother reading a story, the same story read by another female, and the story sung by a male and a female. Infants in the study sat in a comfortable baby chair. A strap on the baby's ankle was connected to a relay mechanism which operated the tape recorders and the counting and timing devices. Movement of the foot altered the sounds heard by the baby. It took only a few minutes for the babies to learn how to manipulate the switch and to begin to control their environment. Seconds of listening time and number of preference changes per interval were recorded and each baby's responses were videotaped. The mother's voice was most preferred and the next most preferred sound was the music. The older babies in the test preferred both female voices equally and all the babies appeared to listen more intently to the
music than the voices.

Wilkin's clinical study (1991) examined the responses of the foetus and newborn to recorded sounds of white noise, rock music and two pieces of art music, with each example separated by a period of silence. The taped sounds were played to the foetus at 30 weeks and again at 38 weeks. Tapes containing one of the pieces of art music were taken home by the mothers for daily playing throughout pregnancy. Post natal testing showed that the babies appeared anxious during the white noise and rock items and appeared to relax during the art music.

Michel (1973) found that babies' responses to musical stimuli are evident very early. He observed babies of two months of age lying perfectly still with fixed attention when a person sang or played a musical instrument. At five months of age, infants were able to listen attentively to instrumental playing for up to half an hour. This fixed attention response was also reported by Moog (1968/1976) whose tests and observations report attentive listening and looks of pleasure from infants as young as four months of age. These babies exhibited no particular attention response to loud or strongly rhythmic music but appeared to show
preference for 'sensually beautiful musical sounds' (p. 55). Moog observed infants of six months who often stopped what they were doing and turned to the source of the sounds while listening attentively with looks of pleasure. Moog found no diminishing of these emotional responses when the music was repeated frequently, which eliminates the possibility that the response was caused by novelty.

2.10 Summary

The literature reveals that very young infants and babies have preferences for certain types of sounds and in a suitable test environment, are able to indicate these preferences. Preschool children also exhibit music preferences which they are able to communicate with the use of simple equipment and modified Likert type scales.

The music preferences of preschool children are thought to be a logical development from music to which they have most frequently been exposed. The home has traditionally been the most important environment for the young child's early encounters with music, but in today's society this environment is rapidly being supplemented by the influences of the child's daily
care situation, which is most often a daycare centre managed by the child care service agencies of government or local government authorities.

The music of popular and rock radio, television and movies is pervasive in the modern world. The common practice of having a radio playing continuously in the child's daily environment not only habituates the child to a particular style of music, but may eventually provide the child with training in not listening to music in any meaningful way (Shuter-Dyson 1981).

Few opportunities appear to exist which allow the young child to become familiar with, and develop a taste for art music. A music listening program suitable for implementation in child care centres, which introduces selected art music in a way which interests young children, may have the effect of expanding the child's music listening preferences.
Chapter 3

DESIGN OF THE STUDY
Chapter 3

DESIGN OF THE STUDY

3.1 Introduction

The study is an attempt to discover whether the musical preferences of preschool children can be expanded beyond the parameters of the music styles most frequently listened to on radio in the home environment. The review of the literature relating to musical preferences of young children provided the theoretical framework for the development of the design of this study. The design includes (1) the criteria for preference, (2) investigation of home environment, (3) the setting for the study, (4) administration of the study, (5) selection of the music and (6) equipment, and (7) the focus of the study.
3.2 Criteria

Preference has been defined as "an act of choosing, esteeming or giving advantage to one thing over another" (Price, 1986). Radocy and Boyle (1979) define music preference as expressing a choice for one work or style of music over another. In this study, the subjects were given the opportunity to select and listen to a piece of music from three styles representing traditional children's music, rock music and art music.

3.3 Home musical environment

The attitudes that parents have and the value which they place on their child's music development were assessed from a Preschool Musical Background Survey (PMBS) developed by the researcher and influenced by similar surveys by Brand (1985), Larsen (1987) Lenz (1978) and Bedsole (1987). The survey also sought information on the music most listened to at home from radio sources.
3.4 Setting

This study was set in six day care centres under the management of the council of a local government authority. These centres cater for the long day care of children from six months to six years of age. Parents of children who attend the centre for at least three days each week were invited to take part in the study.

3.5 Administration of the study

In order to avoid disturbing the children's established routines, the experiment was conducted as part of the regular daily music lessons in the daycare centres. The researcher conducted the experiment with the children's usual teachers acting as assistants and the post test was also conducted in classrooms at the centres. This procedure was recorded on video tape for the purpose of validation. A pilot study was arranged to test the validity of the processes developed for the study.
3.6 Selection of music

Selection of suitable music for listening by preschool children formed a crucial part of the study. Bibliographies developed for this purpose by Dressler (1970) and Kleszynski and Whiren (1982) were considered as well as the guidelines for selecting music listening for preschool children, provided in the early childhood music literature (Andress, 1980; Aronoff 1969; Haines and Gerber, 1984; Bayless and Ramsey, 1982).

3.7 Equipment

The music selected for the study was presented with associated pictures to assist the children in recalling the music. The pictures were also used to identify the music in the post test. The pictures were prepared to avoid colour or size preference and were submitted to an early childhood specialist for validation. The three radio cassette recorders (Digitor 4029) used in the preference test are commonly sold for use by children and are easy to manipulate. Pre-recorded cassettes of the selected music were given to each centre. Cassettes of the selected art music were prepared and given to all families in the treatment groups.
3.8 Focus of the study

The study focused on the effects of repetition of the least familiar music on the later preferences of the subjects and sought to discover whether the repetition of the music in the home environment had a reinforcing effect.

Other areas investigated were the effects of active as opposed to passive listening. Active listening is a teaching influence and involves the use of movement, costumes and colourful resources. Passive listening is quiet listening without the use of resources.
Chapter 4

EXPLORATORY STUDY 1
Chapter 4

EXPLORATORY STUDY: STUDY 1

4.1 Introduction

The exploratory study was conducted in order to improve the validity of the processes to be used in Study 2. The participants were 22 preschool children (mean age = 36 months) attending a community child care centre. The study was administered in five sections: (1) training of the teachers involved in the exploratory study, (2) selection of music and equipment, (3) preparation of the children in the study, (4) administration of the preference test and (5) the collection of data.
4.2 Teacher Training

The teachers at the community child care centre were addressed at a staff meeting where the nature of the research was explained. All members of staff were present at this meeting. Details of the organisation of the treatment groups were given and the form of the music lessons was outlined. Methods of data collection were discussed and use of video recording equipment during the preference test was explained. A transcript of this meeting appears in Appendix A.

4.3 Selection of Music and Equipment

Three pieces of music were selected for listening in study 1. They were: The traditional nursery song, "Twinkle, Twinkle Little Star"; "The Mosquito Dance" by Anatole Liadov from "Eight Russian Folk Songs"; and "Mustang Sally" by Bonny Rice from the movie, "The Commitments". These pieces represented three different styles of music: traditional children's music, art music and rock music. It was assumed that art music would be the least familiar of the selected styles for the children in this study and subsequently "Mosquito Dance" was recorded on cassettes for home listening.
Criteria for selection of the music used in this study was based on previous research (Dressler 1970). This recommended that music selections for preschool children's listening programs should be of brief duration (two minutes) in order to accommodate the short attention span of young children. The music selected should, if possible, be a complete piece, or if taken from a longer work; a movement or a section which is musically intact. The chosen music should contain interesting musical characteristics, prominent enough to be observable by young listeners.

"Twinkle, Twinkle" was a short and a suitably well known tune for preschool children. "The Mosquito Dance": a characteristic piece, with an attractive tune and a duration of two minutes, was also considered to be appropriate. "Mustang Sally" from the sound track of "The Commitments" was a suitably tuneful and interesting rock piece. However, as this piece had a playing time of four minutes, only the first verse and chorus was used in the listening program.

Each piece of music had an associated picture which was shown to the children each time the music was heard. A star was used to represent "Twinkle". "The Mosquito Dance" was represented by a picture of a mosquito and
`Mustang Sally' was represented by a car. In order to avoid variables of size and colour preference each picture was on bright yellow paper cut out and mounted on a background of blue cardboard 40cms by 30cms. No additional decorative colours were used. Copies of these pictures appear in Figure 4.1.

4.4 Preparation of the children

The children were divided into six groups.

Group 1 - The children (n=4) had active listening to the selected music as part of the daily music lesson and took home a pre-recorded cassette of the art music (The Mosquito Dance) for additional home listening.

Group 2 - The children (n=4) took part in the daily active listening lesson but had no additional listening at home.

Group 3 - The children (n=5) had passive listening to selected music as part of the daily music lesson with the selected art music taken home on pre-recorded cassette.

Group 4 - The children (n=2) had passive listening lessons each day but no additional listening at home.
Figure 4.1  Associated pictures for music in study 1.
Group 5 - The children (n=4) had active and passive listening on alternate days and took home a pre-recorded cassette of the art music piece for additional listening at home.

Group 6 - The children (n=3) had no exposure to any of the selected music in class. The children heard the music only once in a lesson presented by the researcher. A short time after this lesson, the children were brought back to the classroom to make their individual choices.

4.5 Administration of the Preference Test

The preference test was administered immediately after the daily music lesson. The class followed the normal morning routine and moved into the outdoor play area for activities. Individual children were asked to accompany the researcher into the classroom to "listen to some music". The class teacher was present to record each child's response on video. The children outside were not able to see or hear the testing procedures.

Three identical cassette players were set up on a low table. Each unit contained a tape recording of one of
the pieces listened to in class. The "play" button on each machine had been marked with a bright green sticker. All of the other control buttons had been covered with masking tape. The pictures used during the preparation period were set up behind each unit to identify the music. Each child was asked to look at the pictures and name the associated music. The researcher then told the child that he/she could hear "the music you like the best", by pressing the green button on the appropriate cassette player.

4.6 Collection of Data

Information about the children's home musical background was sought by means of a Preschool Musical Background Survey (PMBS). A copy of this questionnaire appears in Appendix B. The PMBS asked parents to indicate the radio stations most frequently listened to, whether parents and children sang songs together, whether the child had his/her own records and cassettes and toys which made musical sounds. An explanatory letter accompanied the PMBS. A copy of this letter appears in Appendix C.

Additional information regarding home listening was
obtained from the pre-recorded cassettes taken home by the children. Each cassette had an attached label which parents were asked to mark each time the child listened to the music. Parents were sent a letter with the cassette seeking co-operation in this listening procedure. A copy of the letter appears in Appendix D.

Initially, data on each child's response in class (while listening to music) was obtained by means of observation lists which were marked by teachers at each listening session. Quiet listening, foot tapping, rocking, hand clapping, jumping and dance movements were noted and recorded. The process of marking the lists proved to be cumbersome and as each child's overall response was easily observable, the process was discontinued.

4.7 Results of Study 1

The results from study 1 are presented in Table 4.1. The table shows the treatment group to which each subject belonged. Each subject's age is shown in months.

LSTG DAYC. refers to the number of times the subject listened to the music while at the daycare centre.
LSTG HME. refers to the number of times the subject listened to the music at home. This information was collected from the cassette label marked by the parent at each listening.

TOTAL is the sum of the number of times the subject listened to the music at daycare and at home.

PREF. is the subject's choice of music.

Trad. refers to the traditional children's piece 'Twinkle, Twinkle'.

Artms. refers to the art music piece 'The Mosquito Dance'.

Rock refers to the rock piece 'Mustang Sally'.

4.8 Summary of Study 1.

As a result of the training program, teachers were able to administer the study and conduct the lessons on a daily basis.
Table 4.1 Results of study 1.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>NO.</th>
<th>AGE MTHS.</th>
<th>LSTG. DAYC.</th>
<th>LSTG HME</th>
<th>LSTG TOTAL</th>
<th>PREF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>44</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>trad.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>40</td>
<td>7</td>
<td>11</td>
<td>18</td>
<td>artms.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>37</td>
<td>4</td>
<td>10</td>
<td>14</td>
<td>rock</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>36</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>trad.</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>46</td>
<td>6</td>
<td>0</td>
<td>6</td>
<td>trad.</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>39</td>
<td>7</td>
<td>0</td>
<td>7</td>
<td>trad.</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>35</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>trad.</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>27</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>rock</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>44</td>
<td>5</td>
<td>16</td>
<td>21</td>
<td>artms.</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>40</td>
<td>5</td>
<td>5</td>
<td>9</td>
<td>artms.</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>42</td>
<td>4</td>
<td>7</td>
<td>11</td>
<td>trad.</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>43</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>trad.</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>36</td>
<td>6</td>
<td>9</td>
<td>15</td>
<td>artms.</td>
</tr>
<tr>
<td>4</td>
<td>14</td>
<td>44</td>
<td>9</td>
<td>0</td>
<td>9</td>
<td>rock</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>40</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>trad.</td>
</tr>
<tr>
<td>5</td>
<td>16</td>
<td>44</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>trad.</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>36</td>
<td>7</td>
<td>13</td>
<td>20</td>
<td>artms.</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>41</td>
<td>7</td>
<td>7</td>
<td>13</td>
<td>trad.</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>41</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>trad.</td>
</tr>
<tr>
<td>6</td>
<td>20</td>
<td>41</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>trad.</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>38</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>rock</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>40</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>artms.</td>
</tr>
</tbody>
</table>
After observing the children's listening behaviour during study 1, it was decided to change the art music piece from 'Mosquito Dance' to 'The Comedian's Gallop', by Kabalevsky, for listening in study 2. There are greater dynamic contrasts in the Kabalevsky piece and a faster tempo and wider variety of tonal textures. This music was considered to be more interesting for the children's daily listening and presented greater opportunities for imaginative learning activities.

The preparation of the children was successful for groups 1, 2, 3 and 4. It was found that Group 5 children who received both active and passive listening became more interested in the active listening and continued to dance and move about the room at times when the lesson was designated as a quiet listening time. It was decided to encourage the children to sit and listen quietly, but those who were unable to remain still were permitted to quietly pat, clap or move hands while listening. In study 2, the quiet listening lessons for group 5 followed this procedure.

During the administration of the preference tests a teacher recorded the children on video as they made their choices. The presence of the video camera was largely ignored by the children. All the children appeared to be confident about using the cassette
players and had no difficulty in pushing the play buttons.

Collection of home background data was effective. The PMBS forms were devised to take a minimum of time to complete. The questions were clear and unambiguous. The answering procedure was simple, requiring the marking of a series of boxes.

Collection of data regarding home listening was effective. The pre-recorded cassettes were returned with attached labels appropriately marked.

The conducting of study 1 enabled the processes planned for study 2 to be closely examined. The changing of the art music piece for study 2 was an important result of this study. The training of teachers, preparation of the children and collection of data were all seen to be effective. Video recording of the preference test provided valuable material for future reference.
Chapter 5

REPORT OF STUDY 2
Chapter 5

REPORT OF STUDY 2

5.1 Introduction

The participants in study 2 were 61 preschool children (mean age=42.7 months) attending six district daycare centres managed by a local government authority. The study involved (1) preliminary procedures, (2) involvement of teaching staff, (3) arrangements of groups for treatment, (4) selection of subjects, (5) planning of lessons, (6) administration of preference tests and (7) collection of data.
5.2 Preliminary Procedures

Permission to conduct the study was sought from the coordi­
nator of the council daycare centres. Following
the granting of permission, letters were sent to each
of the six centre directors briefly explaining the
study and seeking to arrange a meeting to discuss
further plans. A copy of this letter appears in
Appendix E.

5.3 Involvement of Teaching Staff

Teachers who acted as assistants during the experiment
met the researcher at their centre and were instructed
in the procedures involved. A written copy of these
procedures was retained by each teacher and appears in
Appendix F. The teachers accepted responsibility for
continuing the daily music lesson in the style set for
that centre, and for following the lesson plans
arranged by the researcher. Copies of these plans are
found in Appendix G. Teachers also agreed to complete
a daily attendance register for each child in the
study. A teacher who was familiar with the use of
video cameras assisted the researcher on the day of the
preference test.
5.4 Arrangement of Groups for Treatment

The six centres in the study were divided into two treatment groups for listening. One group, called the non treatment group, listened to the art music only at the daycare centre. The second, or treatment group, received pre-recorded tapes of the art music to take home for extra listening. Parents were requested to record the number of times the tape was listened to at home. The method of selection of the centres to receive the home listening tapes was completed in consultation with the directors of each centre. Directors who were confident of sustained parental interest and co-operation in the study were selected as centres for treatment. The groups were arranged in the following manner:

Daycare centre 1: Treatment group.
Active listening at daycare.

Daycare centre 2: Non treatment group.
Active listening at daycare.

Daycare centre 3: Treatment group.
Passive listening at daycare.
Daycare centre 4: Non treatment group. Passive listening at daycare.

Daycare centre 5. Treatment group. Alternate days of active and passive listening.

Daycare centre 6. Non treatment group. Heard music only once on day of preference test.

5.5 Selection of Subjects

The subjects were children who attended the daycare centre at least three times each week and were between the ages of 26 months and 60 months. The teachers invited the children's parents to take part in the project and explained the procedures involved. All parents agreed to participate and to answer and return the PMBS questionnaire.

5.6 Planning of Lessons

The music selected for listening was presented as part of the normal daily music lesson. All children at the
centre were part of the class. The treatment groups were not taught separately and the researcher presented the first lesson with the teachers present as participants and observers. As a result of observations made during study 1, the art music piece for study 2 was changed to 'The Comedians' Gallop' by Kabalevsky. Teachers used the description 'circus music' for this piece. A picture of a clown was used in association with this music and appears as Figure 5.1.

At the conclusion of the lesson a short meeting was held at which questions were answered and aspects of the lesson and plans for further daily lessons were discussed. Lesson plan 1 was retained by the centre for reference. This procedure was repeated in the second week, when a second lesson was presented by the researcher using some new songs and games but retaining the music listening segments. Copies of these lesson plans appear in Appendix G.

5.7 Administration of the Preference Test

During week three of the experiment the researcher again visited the centres and presented a music lesson.
Figure 5.1  Associated picture for 'Comedian's Gallop' used in study 2.
The children then continued with their normal morning routines. The children who were participants in the study were taken individually by a teacher into the room (which had been set up as the preference test area) to make their choices. A total of 65 children were tested. Two refused, through apparent shyness, to make a choice and were eliminated from the experiment. The testing procedure was video recorded and later examined by three independent validators; one, a visiting lecturer in music education at Sydney Conservatorium of Music, and two early childhood music specialists from the Newcastle University Conservatorium Early Childhood Music Unit. The validators agreed that two of the children did not appear to make confident choices. These children, subjects 12 and 26 on the video tape, were then eliminated from the study.

This validation procedure demonstrates that most young children are able to make clear choices between music styles and are capable of handling simple sound equipment in order to select the preferred style of music.
5.8 **Data Collection**

The total number of times each of the remaining subjects (n=61) had listened to the art music was found by adding the number of times the subject heard the music at daycare to the number of home listenings recorded by parents on the tape which was taken home.

Data collected from each centre regarding age range and groupings, number of boys and girls in each centre, and their preferences, is shown in Table 5.1. The radio station most frequently listened to at home is stated as a percentage for each centre.

Key to Table 5.1:–

**AGES:** \( r \) = range of ages in centre.

- grouping of ages.
  - 1 = 26-36 months
  - 2 = 36-48 months
  - 3 = 48-60 months

**SEX:** \( F \) = female, \( M \) = male.

**PREFS:** Preferred music at test.

- 1 = traditional ("Twinkle Twinkle")
- 2 = rock ("Mustang Sally")
- 3 = art music ("Comedian's Gallop")

**RADIO:** Radio stations most frequently heard at home.

- 0 = no radio listening
- 1 = rock stations
- 2 = both rock and art music stations
- 3 = art music stations
Table 5.1

Results of study 2.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 2</td>
<td>F 5</td>
<td>1 2</td>
<td>0 8%</td>
</tr>
<tr>
<td></td>
<td>2 2</td>
<td>M 7</td>
<td>2 5</td>
<td>1 75%</td>
</tr>
<tr>
<td></td>
<td>3 8</td>
<td></td>
<td>3 5</td>
<td>2 8%</td>
</tr>
<tr>
<td></td>
<td>r 27-59</td>
<td></td>
<td></td>
<td>3 8%</td>
</tr>
<tr>
<td>2</td>
<td>1 3</td>
<td>F 4</td>
<td>1 2</td>
<td>0 0</td>
</tr>
<tr>
<td></td>
<td>2 1</td>
<td>M 8</td>
<td>2 3</td>
<td>1 87.5%</td>
</tr>
<tr>
<td></td>
<td>3 4</td>
<td></td>
<td>3 3</td>
<td>2 12.5%</td>
</tr>
<tr>
<td></td>
<td>r 26-59</td>
<td></td>
<td></td>
<td>3 0</td>
</tr>
<tr>
<td>3</td>
<td>1 4</td>
<td>F 4</td>
<td>1 2</td>
<td>0 0</td>
</tr>
<tr>
<td></td>
<td>2 3</td>
<td>M 5</td>
<td>2 6</td>
<td>1 100.0%</td>
</tr>
<tr>
<td></td>
<td>3 2</td>
<td></td>
<td>3 1</td>
<td>2 0</td>
</tr>
<tr>
<td></td>
<td>r 32-55</td>
<td></td>
<td></td>
<td>3 0</td>
</tr>
<tr>
<td>4</td>
<td>1 6</td>
<td>F 6</td>
<td>1 2</td>
<td>0 9%</td>
</tr>
<tr>
<td></td>
<td>2 4</td>
<td>M 5</td>
<td>2 4</td>
<td>1 72.7%</td>
</tr>
<tr>
<td></td>
<td>3 1</td>
<td></td>
<td>3 5</td>
<td>2 9%</td>
</tr>
<tr>
<td></td>
<td>r 26-49</td>
<td></td>
<td></td>
<td>3 9%</td>
</tr>
<tr>
<td>5</td>
<td>1 2</td>
<td>F 6</td>
<td>1 1</td>
<td>0 0</td>
</tr>
<tr>
<td></td>
<td>2 5</td>
<td>M 4</td>
<td>2 3</td>
<td>1 100.0%</td>
</tr>
<tr>
<td></td>
<td>3 3</td>
<td></td>
<td>3 6</td>
<td>2 0</td>
</tr>
<tr>
<td></td>
<td>r 30-59</td>
<td></td>
<td></td>
<td>3 0</td>
</tr>
<tr>
<td>6</td>
<td>1 3</td>
<td>F 8</td>
<td>1 2</td>
<td>0 9%</td>
</tr>
<tr>
<td></td>
<td>2 4</td>
<td>M 3</td>
<td>2 5</td>
<td>1 63.6%</td>
</tr>
<tr>
<td></td>
<td>3 4</td>
<td></td>
<td>3 4</td>
<td>2 0</td>
</tr>
<tr>
<td></td>
<td>4 29-59</td>
<td></td>
<td></td>
<td>3 27.2%</td>
</tr>
</tbody>
</table>
Chapter 6

ANALYSIS OF STUDY 2 RESULTS
Chapter 6

ANALYSIS OF STUDY 2 RESULTS

6.1 Introduction

The results presented in Chapter 5 provided data relating to the music preferences of 61 preschool children. The influences of (1) age, (2) repeated home listening to selected music, (3) home radio listening (4) the home environment and (5) teaching styles and presentation, were observed.

In order to assess the relative importance of each of these variables, further analysis was required. Subjective analysis of the data provided the initial information some of which was then further examined using the statistical procedures described.
6.2 Influence of Age

There were 61 children in the study aged from 26 months to 60 months. In order to discover the possible influence of age on the music selection behaviour of the children at the preference test, the subjects from the six centres were grouped into three categories:-(1) children between 26 and 36 months, (2) children between 36 and 48 months and (3) children between 48 and 60 months.

Table 6.1 Age Categories in Each Centre

<table>
<thead>
<tr>
<th>Centre</th>
<th>Cat. 1</th>
<th>Cat. 2</th>
<th>Cat. 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>16%</td>
<td>16%</td>
<td>68%</td>
</tr>
<tr>
<td>2</td>
<td>37.5%</td>
<td>12.5%</td>
<td>50%</td>
</tr>
<tr>
<td>3</td>
<td>44.4%</td>
<td>33.3%</td>
<td>22.2%</td>
</tr>
<tr>
<td>4</td>
<td>54.5%</td>
<td>36.3%</td>
<td>9%</td>
</tr>
<tr>
<td>5</td>
<td>20%</td>
<td>50%</td>
<td>30%</td>
</tr>
<tr>
<td>6</td>
<td>27.2%</td>
<td>36.3%</td>
<td>36.3%</td>
</tr>
</tbody>
</table>

Examination of the results of the preference test shown in Table 6.2 indicate that the youngest subjects (category 1) showed equal preference for the traditional children's music and the art music. There was a slightly higher interest in the rock music piece.
Table 6.2
Age Groups and Preferences.

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub.</th>
<th>Pref.</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 -36 months</td>
<td>20</td>
<td>1</td>
<td>6</td>
<td>30.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>8</td>
<td>40.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>6</td>
<td>30.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>20</td>
<td>100.0</td>
</tr>
<tr>
<td>36 -48 months</td>
<td>18</td>
<td>1</td>
<td>3</td>
<td>16.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>5</td>
<td>27.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>10</td>
<td>55.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>18</td>
<td>100.0</td>
</tr>
<tr>
<td>48 -60 months</td>
<td>23</td>
<td>1</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>13</td>
<td>56.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>8</td>
<td>34.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>23</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Sub: indicates the number of children in each category.

Pref: indicates the subject's choice of music at the preference test.

1: traditional children's music.
2: rock music
3: art music.
In the middle age range (category 2) the children clearly preferred the art music, with rock being the second choice and a decline in preference for the traditional children's music. The eldest subjects (category 3) showed a greatly increased preference for rock music, and a decline in preference for art music. There was also a considerable decline in preference for the traditional children's music. These findings are consistent with previous research indicating a preference for rock music as the child grows older.

6.3 Repetition

The influence of repetition on the listening preferences of preschool children was of particular interest in this study. As art music was assumed to be the style least familiar to the children, the selected art music piece was recorded on cassettes and sent home for extra listening with children from centres 1, 3 and 5. The preferences of these children were compared with those of the children in centres 2 and 4 who heard the art music only when at daycare, and the children at centre 6, who heard the music only once.

This method of repetition was thought to have the added
benefit of being heard in the child's home environment. Data from the Preschool Musical Background Survey (PMBS) suggested that parents were aware of the benefits of music in child development, and there was evidence that subjects in the study came from musically supportive home backgrounds.

Parents were asked to encourage children to listen to the tape once each day for the two weeks of the study. Several parents reported that their children had requested more than the required number of playings. They were advised that more repetitions than the suggested number were permissible if specifically requested by the child.

Initial examination of the preferences for the art music piece by the children in the treatment groups seemed to indicate little relationship to the number of times the child heard the music at home. To enable closer examination of the data, the number of repeated listenings, (as marked on the home listening tapes) was reduced to three groupings:—

Group 1: fewer than 10 repeated listenings at home.
Group 2: from 10 to 20 repeated listenings at home.
Group 3: more than 20 repeated listenings at home.
Table 6.3 shows the repeated listening group and
art music preferences of subjects in each centre.

Table 6.3 Number of art music repetitions at home and art music preferences by centre

<table>
<thead>
<tr>
<th>Centre</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Art music preference at that centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50%</td>
<td>16%</td>
<td>33.3%</td>
<td>41%</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>37.5%</td>
</tr>
<tr>
<td>3</td>
<td>77.7%</td>
<td>22.2%</td>
<td>0</td>
<td>11.1%</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>45%</td>
</tr>
<tr>
<td>5</td>
<td>70%</td>
<td>39%</td>
<td>0</td>
<td>60%</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>36%</td>
</tr>
</tbody>
</table>

There is little difference between centres 1 and 2 in preferences for the art music, in spite of the extra listening by centre 1.

The subjects in centre 3 listened to the art music at home the required number of times, but only 11% chose it at the preference test. Subjects in centre 4, without extra home listening, showed a 45% preference for the art music.

The preferences of the control group (centre 6) were little different to most of the other groups (36%), yet these children had no exposure to the art music except
on the day of the preference test.

60% of the children in centre 5 chose the art music. This may be attributed to the extra home listening. However, this was the only group which had a combination of both active and passive listening lessons on alternate days. This combination of both types of listening may also have influenced preference.

It appears that in this study, repeated listening to the art music did not cause these groups to have a significantly higher preference than the other groups for that music. This could be explained by the uncontrolled variables which could have been present in the home environment during the listening times.

It was deemed inappropriate to present parents with large amounts of detailed instructions regarding the home listening program. Parents were simply asked to listen to the music with the child at any suitable time and to mark each listening on the label on the cassette. In a situation where parental co-operation is sought for a program such as this, it is likely that uncontrolled variables will be present.
6.4 Influence of Radio Listening

The PMBS surveys revealed that of 50 of the subjects in the study came from homes where the radio stations most frequently listened to were those which featured only rock music. Three families listened to both rock and art music stations and the children from these families all chose the rock music at the preference test. Three families did not listen to any radio. Two of the children in this group chose the traditional music and the other chose the art music. Only five subjects came from homes where radio stations which featured art music were most frequently heard. Of these five subjects, only one chose the art music at the preference test. Two chose traditional children's music and two chose the rock music.

The eleven subjects in this group formed too small a sample to enable any conclusions to be drawn regarding the effect on preference of frequent home radio listening to :- (a) both rock and art music stations, (b) no radio stations and (c) art music stations.

The influence of frequent home listening to rock music radio only, did not appear to have a strong effect on the subject's choice of music at the preference test.
Only 19 of the 50 subjects in this group (38%) chose rock music as their preferred piece. The art music was selected by 22 subjects (44%) and nine subjects chose the traditional children's music. The apparent lack of influence of rock radio listening on the preferences of these children may have several explanations.

The PMBS forms sought information regarding the radio stations most frequently listened to at home. The survey did not stipulate that parents should indicate who listened when it was playing. It is possible that younger members of the family may have spent little time listening to the radio, thus diminishing its effect.

Questions were not asked in the PMBS regarding the presence of older siblings in the home. If the subjects in the study were the oldest children in the family, there would be an absence of peer pressure to listen more frequently to rock radio.

The preschool children in this study may not have developed a preference for any specific style of music and appeared willing to embrace unfamiliar styles. Interest in the art music may have been the result of the teaching styles used in the presentation of this
music in the daycare centres. The art music may have been attractive because of its novelty.

The children in centre 3 were the only subjects in this part of the study to show a strong preference for rock music and a very low preference for art music at the preference test. This is not consistent with the results from the other centres, where equal preference for art and rock music or a greater preference for art music was evident.

During the progress of the study, it was observed that centre 3 had the local rock radio station playing daily in the children's playrooms as background music. The PMBS forms from centre 3 also showed that all the children at this centre came from homes where rock radio is the most frequently played station. The staff of centre 3 had also expressed their personal interest in, and commitment to rock music and this, combined with the other factors may have caused the considerably higher preferences for rock music at this centre.

Table 6.4 shows the music preference test results from all six centres, for subjects with rock radio as the most frequently listened to radio station in the home.
Table 6.4

Music preferences: Frequent home rock radio listening.

<table>
<thead>
<tr>
<th>Pr.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Row Tot</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>22.2</td>
<td>22.2</td>
<td>22.2</td>
<td>11.1</td>
<td>11.1</td>
<td>11.1</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>22.2</td>
<td>28.6</td>
<td>22.2</td>
<td>12.5</td>
<td>10.0</td>
<td>14.3</td>
<td>18.0</td>
</tr>
<tr>
<td></td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>10.5</td>
<td>10.5</td>
<td>31.6</td>
<td>15.8</td>
<td>15.8</td>
<td>15.8</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>22.2</td>
<td>28.6</td>
<td>66.7</td>
<td>37.5</td>
<td>30.0</td>
<td>42.9</td>
<td>38.0</td>
</tr>
<tr>
<td></td>
<td>4.0</td>
<td>4.0</td>
<td>12.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>22.7</td>
<td>13.6</td>
<td>4.5</td>
<td>18.2</td>
<td>27.3</td>
<td>6.0</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>55.6</td>
<td>42.9</td>
<td>11.1</td>
<td>50.0</td>
<td>60.0</td>
<td>42.9</td>
<td>44.0</td>
</tr>
<tr>
<td></td>
<td>10.0</td>
<td>6.0</td>
<td>2.0</td>
<td>8.0</td>
<td>12.0</td>
<td>6.0</td>
<td></td>
</tr>
<tr>
<td>Col.</td>
<td>9</td>
<td>7</td>
<td>9</td>
<td>8</td>
<td>10</td>
<td>7</td>
<td>50</td>
</tr>
<tr>
<td>Tot.</td>
<td>18.0</td>
<td>14.0</td>
<td>18.0</td>
<td>16.0</td>
<td>20.0</td>
<td>14.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Pr. denotes preference for:—

1: traditional children's music piece.
2: rock music piece.
3: art music piece.
6.5 Home Environment

Data from the PMBS was used to discover the level of interest and support for music in the homes of the children in the study. Parents had answered questions relating to the amount and frequency of singing in the home with the child. Information was also gathered on purchase of cassettes and musical toys for the child, taking the child to concerts, allowing the child to have access to a cassette player and parental playing of a musical instrument. Parents were also asked to state their value of music in child development.

In order to discover which of the factors together influenced the forming of a supportive musical home background for preschool children, the home environment variable data was reduced using a Principal Components Factor Analysis (PC) within SPSS for the Macintosh (see Table 6.5). This statistical process extracted three factors which together contributed 62% of the variance. Factor 1 accounted for 28.3%, factor 2 accounted for 21.7% and factor 3 accounted for 12.7% (refer to Table 6.5).
Table 6.5

Principal-components factor analysis

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.5484</td>
<td>28.3</td>
<td>28.3</td>
</tr>
<tr>
<td>2</td>
<td>1.8864</td>
<td>21.0</td>
<td>49.3</td>
</tr>
<tr>
<td>3</td>
<td>1.1418</td>
<td>12.7</td>
<td>62.0</td>
</tr>
<tr>
<td>4</td>
<td>0.9171</td>
<td>10.2</td>
<td>72.2</td>
</tr>
<tr>
<td>5</td>
<td>0.8541</td>
<td>9.5</td>
<td>81.6</td>
</tr>
<tr>
<td>6</td>
<td>0.6287</td>
<td>7.0</td>
<td>88.6</td>
</tr>
<tr>
<td>7</td>
<td>0.5110</td>
<td>5.7</td>
<td>94.3</td>
</tr>
<tr>
<td>8</td>
<td>0.3390</td>
<td>3.8</td>
<td>98.1</td>
</tr>
<tr>
<td>9</td>
<td>0.17354</td>
<td>1.9</td>
<td>100.0</td>
</tr>
</tbody>
</table>

These factors were then rotated using the Varimax Rotation which converged in five iterations. Factor 1 when rotated, loaded most heavily on the three variables concerning singing in the home. These were:- parents and children singing together (0.9207), parent singing to their children (0.8746) and parents helping their children to learn songs (0.8314). This indicates that parents involved in these direct musical activities with their children were producing a very musically supportive environment.
Factor 2 loaded on variables which together indicated parents' overt material commitment to music. They were the willingness to buy records and cassettes for their children (.6911), supplying their children with musical toys (.5287), and the value which parents placed on the importance of music in child development (.7116).

Factor 3 was most heavily associated with listening to or experiencing music, with variables which related to the parents' willingness to take children to concerts (.3988), parents who play a musical instrument (.7980), and allowing the child to have access to a cassette player (.6939).

Table 6.6 Summary results of principal components factor analysis after the varimax rotations.

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caspl</td>
<td>.0699</td>
<td>.1277</td>
<td>.6939</td>
</tr>
<tr>
<td>Concert</td>
<td>.0901</td>
<td>.6279</td>
<td>.3988</td>
</tr>
<tr>
<td>Help</td>
<td>.8314</td>
<td>-.0040</td>
<td>-.0401</td>
</tr>
<tr>
<td>Instr</td>
<td>-.1115</td>
<td>.0018</td>
<td>.7980</td>
</tr>
<tr>
<td>Recds</td>
<td>-.1203</td>
<td>.6911</td>
<td>.1865</td>
</tr>
<tr>
<td>Sing</td>
<td>.8746</td>
<td>.0417</td>
<td>.0156</td>
</tr>
<tr>
<td>Tog</td>
<td>.9207</td>
<td>-.0166</td>
<td>-.0128</td>
</tr>
<tr>
<td>Toys</td>
<td>-.3516</td>
<td>.5287</td>
<td>-.1892</td>
</tr>
<tr>
<td>Value</td>
<td>.2846</td>
<td>.7116</td>
<td>-.0494</td>
</tr>
</tbody>
</table>
To investigate the possible influence of home environment on the music piece selection of children in the study, the range of original home background scores presented by the factor analysis was divided into three equal parts. These represented a high, moderate and low support for music in the home environment.

The influence of home environment on the subject's choice of the art music piece was investigated using descriptive statistics. Information was used from the three centres where children had taken home the art music for extra listening (centres 1, 3 and 5). There were 12 subjects from these centres who chose the art music piece at the preference test. The average scores for each of the factors involved with home musical background showed that the subjects from centres 1, 3 and 5 who chose the art music, came from homes with a moderate level of home support for music. This may indicate that a home environment level with at least average support for music is necessary in order to cause a preference for art music.

6.6 Teaching Style and Presentation

In order to investigate the possible influence of
different teaching styles on children's preference, the centres were statistically examined as four groups, to represent the four different teaching styles used in the study. The results are presented in Table 6.7.

<table>
<thead>
<tr>
<th>Preference</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Row Tot</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20.8</td>
<td>20.2</td>
<td>10.0</td>
<td>18.2</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>6.6</td>
<td>6.6</td>
<td>1.6</td>
<td>3.3</td>
<td>18.0</td>
</tr>
<tr>
<td>Group 1</td>
<td>39.6</td>
<td>51.5</td>
<td>30.0</td>
<td>45.5</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>13.1</td>
<td>16.4</td>
<td>4.9</td>
<td>8.2</td>
<td>42.6</td>
</tr>
<tr>
<td>Group 2</td>
<td>39.6</td>
<td>28.3</td>
<td>60.0</td>
<td>36.4</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>13.1</td>
<td>9.8</td>
<td>9.8</td>
<td>6.6</td>
<td>39.3</td>
</tr>
<tr>
<td>Group 3</td>
<td>20</td>
<td>20</td>
<td>10</td>
<td>11</td>
<td>61</td>
</tr>
</tbody>
</table>

Group 1 received an active listening program involving movement and use of colourful resources and were taught by teachers who showed approval of the art music style as well as the other styles presented.

Group 2 received a passive program of listening without resources and were taught by teachers who showed
approval for all styles.

Group 3 received a combination of treatment with active and passive listening on alternate days presented with teacher approval for all styles.

Group 4 received no treatment. Their preferences were made after one active listening session with teacher approval for all styles.

Examination of the statistics for preference related to the teaching styles of each group reveal that there is an art music preference when the music is presented with interesting activities and not solely as listening (group 2 highlights this). Passive listening is less effective in expanding the children's listening parameters than other types of treatment.

Group 3 demonstrated a higher preference for the art music over the rock piece. The style of teaching for this group had alternated one active lesson with a passive lesson the next day. This treatment may have the effect of influencing more children than the use of a single teaching style.
6.7 **Summary**

The results appear to indicate that there are two components which influence preference. In this study the components are the age of the subjects and a varied teaching style. Repetition of the art music did not cause subjects to prefer that style, but may have been a contributing factor in the trend throughout the groups to equally prefer art music and rock music. Home listening to radio stations featuring particular styles of music did not cause preference for those styles in this study.
Chapter 7

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS
7.1 Introduction

This study was concerned with investigating ways in which the music preferences of preschool children may be expanded to include western art music. The study examined the influence of age, repetition, radio listening, home background and teaching style on the development of music preference in preschool children. The design of the study allowed the variables of repetition and teaching style to be controlled.

This chapter presents a summary of the results of the study, discusses the implications of this research for parents and early childhood teachers and examines future directions for research.
7.2 Summary of Results

The results of the study demonstrated that:

(a) A home environment and parental approval of rock music did not appear to influence the children in the study to prefer this style. There was equal preference for rock and art music.

(b) Exposure to an unfamiliar style of music in a class listening program, presented with a variety of teaching approaches, provided children with a context in which decisions to accept the new style were made.

(c) Repetition of the art music in the daily music lesson at the daycare centre was sufficient to cause a trend for preschool children to prefer that music. Repetition in the home environment did not contribute significantly to a preference for art music.

(d) Teaching styles which allow for a variety of presentation styles are more effective than a single teaching style in causing preference for art music.
(e) In general, as subjects age, there was a preference for rock music. This indicates that any attempt to expand preferences for a variety of styles needs to take place in the early years of preschool.

(f) Most preschool children are able to make clear choices between musical styles and are able to demonstrate their preferences by manipulating simple sound equipment.

(f) A home background which supports the child's musical development should include singing by parents and children, helping children to learn songs, supplying the child with musical games and toys, and taking the child to concerts.

7.3 Implications of the Study

The results of this study have a number of implications for parents and teachers of children in their early years.
7.3.1 Implications for Early Childhood Teachers.

This study provided information for early childhood teachers regarding ways in which music listening programs can be developed which will allow the children's listening parameters to be extended. The use of interesting resources, varied teaching styles and frequent repetition of the music can be successfully used to create music programs which will effectively widen the music listening choices of young children.

7.3.2 Implications for Parents

Three areas of parental behaviour were found to be of importance in providing a supportive home background for preschool children's musical development. These were:

1. The importance of singing in the home. Parents and children singing together, parents singing songs to their children and parents taking time to teach songs to their children indicated strong support for music in the home.

2. The willingness of parents to buy records and cassettes of music for their children and to provide musical toys, shows a strong material
commitment to the importance of music for children.

2. Parents desire to provide listening experiences for children by taking them to concerts and allowing them to have access to a cassette player was shown to be important. The example of a parent playing a musical instrument was of some influence, but less than the first and second factors.

7.4 Strengths and Limitations of the Research Program

The study was designed with assistance from the early childhood specialist teachers from the centres involved in the study. The participation of these teachers provided expert guidance in the preparation and use of age appropriate resources for the study and effective methods of presentation. Assistance was also provided in selecting children for the study.

The study was a controlled investigation which lent itself to an empirical approach. The results obtained were amenable to quantitative analysis. The use of video recording techniques allowed the evidence to be validated by independent observers and provided evidence of clear music preference decisions by
preschool children.

The study was limited by the use of music selected only from the western tonal tradition.

Lack of sufficient information regarding home radio listening was a limitation in this study. The PMBS results could not provide sufficient data for conclusions to be drawn on the effects of radio listening on the children's music preferences.

7.5 Recommendations for Future Research

The results suggest that there are several directions for future research:-

1. A larger number of participants could be involved in future studies.

2. The listening examples could be taken from a wider area of music styles and could include music from non western traditions.

3. More detailed investigations of the influence of home background on children's music preferences could be undertaken.
4. The class lesson procedures used in this study could be used in further studies to introduce art music styles to preschool children. The effectiveness of these procedures could be further investigated.

7.6 Concluding Remarks

There is a need in early childhood music education for further controlled research. In the area of music preference, teaching style and age (and to some extent, home background) must be considered. This study provides a basis for research in examining the factors which contribute to music preference in the early years. Additionally, early childhood teachers are required to possess a variety of skills, and to be models for their students.

This study represents the first steps in the investigation of the complex processes of teaching which contribute to expanding music listening parameters for preschool children.
BIBLIOGRAPHY


Appendix A

Transcript of staff meeting held before commencement of study 1.

Thank you for the opportunity to meet the teachers and also thank you for agreeing to take part in this music research project which is part of my Master of Music (Music Education) program.

The aim of my study is to investigate the musical preferences of young children. Already, musicians have found through research, that most children prefer to listen to popular and rock music. It is known that by primary school age, most children will not choose to listen to music of other styles. I hope to discover how early these preferences begin to emerge.

It is quite logical for children to prefer to listen to the style of music which is constantly heard in their daily lives. I am interested in discovering what may happen to the children's preferences if we introduce an unfamiliar style of music into their daily music lessons.

Research also shows that young children's attitudes to
music are influenced by the attitudes of adults whom they admire and respect. We also know that being actively involved in some associated activity while listening to music causes a rise in the children's interest in that music. It is possible that the children may become interested in unfamiliar musical styles if, for example, their teachers join with them in dancing, movement and other activities while listening to the music.

Three pieces of music have been selected for this study. They are 'Twinkle, twinkle', 'Mustang Sally' and 'The Mosquito Dance'. The children are already very familiar with 'Twinkle Twinkle' and may also know 'Mustang Sally' or be familiar with similar rock music styles. (play portion of 'Mustang Sally' tape here). 'The Mosquito Dance' by the Russian composer Liadov, is the unfamiliar music chosen for the study. The piece is short (52 seconds) with an attractive tune. It is played by flutes and piccolos. (play tape of 'Mosquito Dance' here)

The study will take place over a two week period. During this time the children will hear the three selected pieces of music each day in their music lesson. Each piece of music has an associated picture.
These pictures will be shown to the children every time they hear the music. (show the three pictures here) At the end of the two weeks the children will be asked to choose their favourite piece of music.

For the purposes of the study the children will be placed into six groups. Group 1 will be involved, with their teachers, in an active music listening program. Resources such as pictures, coloured scarfs and ribbons, will be used to add interest to the lessons. Children in this group will take home a pre-recorded cassette of the Mosquito Dance for extra listening. Group 2 children will have the same listening experiences as group 1 but will not take home a cassette for extra listening.

Group 3 children will have passive music listening experiences. They will be encouraged to sit and listen quietly to the music with their teachers. They will take home a pre-recorded cassette of 'The Mosquito Dance' for extra listening. Group 4 children will have the same type of listening experience as group 3, but will not take home a cassette.

Group 5 children will have both active and passive listening on alternate days. They will take home a cassette for extra listening. Group 6 children will
have no exposure to any of the selected music in daily lessons. They will hear the pieces once in the music lesson which will be given immediately before the preference tests.

At the end of the two week preparation period, the children will be asked to choose their favourite music. I want to keep a very natural and informal atmosphere for this. I propose to use a corner of the classroom to set up three small identical cassette players of the type sold for children to use. Each player will contain a cassette of one of the pieces listened to in class. The pictures used by the children to identify the selected music will be displayed above the appropriate player. Each cassette player will have the PLAY button marked with a bright green sticker and all the other control buttons will be taped down. Children will be brought in to the room individually and asked to look at each player and identify the music from the picture. They will then be told that to hear the music they "like the best" they should press the green button on the appropriate player.

It is necessary for each child's choice to be recorded on video for purposes of validity of the study and also to allow future examination of the procedures used. It
would be very helpful if one of the teachers could act as camera person on the required day and thus avoid having to use someone who is not known to the children. This will help to maintain a natural environment and avoid unsettling the children.

Data regarding the home music background of each child will be sought by means of a parent questionnaire. The questionnaire is accompanied by a covering letter which explains the research being undertaken. These forms should be returned to the centre as soon as possible.

The children in groups 1, 3 and 5 will also take home a pre-recorded cassette. An explanatory letter accompanying each tape asks the parent to place a tick on the cassette label every time the child listens to the music. The cassettes should be returned at the end of the study.

On the first day of the study I will present a music lesson to the children with the participating teachers attending as observers. My lesson plan may form the outline for lessons for the remainder of the week with all three selected pieces being played to the children each day and the accompanying pictures shown. I will present another lesson at the beginning of the second
week which will use some different songs and activities. As before, teachers will continue the lessons throughout the week with the three pieces being played and the pictures shown each day.

On the day of the preference test the children will have their normal music lesson at the normal time. I will be present at this lesson. After the children have moved outside for activities we will set up a table with the cassettes and prepare a space for the video camera. I will bring in the children one at a time and ask them to choose their favourite music. We will video this procedure.

There is a prepared folder available for the use of teachers assisting in the study. It contains a copy of guidelines for the group as explained today, and a daily listening record for each child in the group. It also contains a copy of the parent questionnaire and the covering letter which accompanies the cassette. A lesson plan for the first music lesson is included and more plans will be given to you in the second week.

The information collected during this study may help to answer some questions about the music listening preferences of preschool children. Does repetition of
unfamiliar music causes the children to like it? Does active listening which involves adults who show approval influence children's preferences? Do very young children like the same music as older preschool children? It will be interesting to discover whether our study can throw light on these questions.

Thank you very much for your attention. I hope that everyone (especially the children) will enjoy being part of this study and I would now like to invite you to ask any questions you may have about the project. Thank you.
Appendix B

Preschool Music Background Survey form

MUSIC QUESTIONNAIRE FOR PARENTS.

CHILD'S FIRST NAME:..........................DATE OF BIRTH:...............

Please tick only one box only to answer the following questions.

1. Do you sing to your child?
   - almost daily
   - every day
   - sometimes
   - hardly ever
   - never

2. Do you and your child sing together?
   - almost daily
   - every day
   - sometimes
   - hardly ever
   - never

3. a) Do you help your child to learn songs?
   - almost daily
   - every day
   - sometimes
   - hardly ever
   - never

4. Does your child have toys which make sounds or music?
   - yes
   - no

5. Do you buy records or cassettes of music for your child?
   - yes
   - no
6. Does your child have access to a cassette player?
   yes  no
   □    □

7. Do you ever take your child to concerts?
   yes  no
   □    □

8. Do you play a musical instrument?
   yes  no
   □    □

9. Which radio station is most often played in your home?
   Coast  2GO  JJJ  MMM  ABC  Other?
   □    □    □    □    □    □

10. Do you believe that experience with music is important in child development?
    very important  fairly important  don't know  not important
    □    □    □    □
Appendix C

Letter accompanying PMBS form

The University of Sydney
SYDNEY CONSERVATORIUM OF MUSIC

Dear Parent,

Your child's daycare centre has agreed to take part in a study which will investigate the musical preferences of young children. This study is part of the degree of Master of Music (Music Education) which I will complete this year.

I would appreciate it if you could help by filling in the brief questionnaire which is enclosed and returning it to your child's teacher tomorrow, or as soon as possible. All the information which you provide will be strictly confidential and will be used only to provide background regarding your child's musical interests.

Many thanks for help.

Yours sincerely,
Dear Parent,

Today your child has been listening to some specially selected music during "Music Time" at daycare. We have sent you a cassette of this music and hope that you will be able to listen to it with your child sometimes. Listening once or twice each day is all that is needed. This could happen on the way to or from daycare in the car, or at some other other informal time that suits you.

It would be helpful if you could place a tick on the cassette label each time your child listens to the music, and return it to the centre on Thursday, 1st July.

I am most grateful for your co-operation in this study.

Many thanks.

Yours sincerely,
Appendix E
Letter to directors of child care centres.

The Director,
Child Care Centre

Dear

I am writing in reference to our telephone conversation of last week. I will call at the centre on Monday as arranged, to meet the staff and give you more details about the project.

The study I am conducting will investigate the type of music which is preferred by preschool children. I hope to be able to gather information which will help to discover the factors which influence the music choices made by children.

The music lessons which I am proposing to conduct could involve all the children in your centre and at a later stage, I would like to interview some of the children individually. The aim is to keep the situation as natural as possible and not to disrupt your routines in any way.

I am very grateful for the opportunity to work in your centre and thank you most sincerely for your interest in this project.
Appendix F
Lesson procedures for teachers assisting with the study
Centre 6.

Thank you for agreeing to help with my research project. My aim is to investigate the musical preferences of young children. I am interested in discovering at what age children begin to show liking for certain types of music, and what the factors are which influence these choices. The children in the study will be aged from 26 months to 60 months.

I plan to visit your centre and present a short music lesson for the children. During this lesson, the children will hear two pieces of music which I believe will be new to them. One is "The Comedian's Gallop" and the other is "Mustang Sally". The children will be shown pictures to associate with these pieces. They will also sing "Twinkle Twinkle" and see a picture for this song also.

After their morning tea break, I will interview each child separately and ask them to choose their favourite piece from the three songs heard in the music lesson. We will video each child as he/she makes her choice.
There will be three identical cassette players in the room and each one will have one of the pictures used in the music lessons displayed above it. It would be very helpful if one of the teachers could operate the video camera, as this avoids the necessity of bringing in a person not known to the children, which could cause a change in their normal reactions.

It will be interesting to see which pieces the children choose after hearing them only once. This information will be compared with another centre where the children are hearing the music each day. We hope to discover whether frequent listening makes a difference to the choices made by very young children.

I will also collect the questionnaires which the children took home last week. The information about their home musical background will provide important data for the research.

My thanks to you and your teachers for helping in this project,

Margaret Priest Smith.
Appendix G
Lesson plans.

MUSIC LESSON PLAN 1.

Introductory Activity: Sally go Round the Sun.

Movement: Teacher plays drum patterns for class to run, tiptoe, walk or gallop.

Sing: Sing some well known songs (include 'Twinkle' and show picture)

Quiet: Teacher opens discussion about the circus. Children say who they might see at the circus. Teacher shows clown picture. Teacher says "I have some music about the circus. Listen and you will hear lots of funny circus people. Sometimes you can hear a clown fall down with a bang! Can you hear the part where the clown goes up high?"

Class sit quietly and listen to 'Comedians' Galop' (Discussion may follow).
Listen: Play "Touch your Ears."
Sing "If you're wearing red."
Sing "Take You Riding in my Car."
Teacher says. "Here is some different music about a car. It is a Mustang car called Mustang Sally." (Show picture of car as children listen to the rock song.)

Children sit and listen quietly to music with teachers. (discussion may follow)

Conclusion. Show the three song pictures and see if the children can remember the associated music.

* * * * * * *

This plan can form the outline for a daily music lesson. You could substitute different songs or activities of your choice but be sure to let the children hear the two pieces on the tape ("Comedian's Gallop" and "Mustang Sally") and see all the pictures every day please.
MUSIC LESSON PLAN 2.

Introductory Activity:
(a) Looby Loo
(b) Sally go Round the Sun

Movement: I'm a Train that Goes. (song)
Cars go fast too! Let's listen to "Mustang Sally" and you can move with the music.

Songs: Mary Wore a Red Dress.
Naughty Pussy Cat.
Twinkle, Twinkle (show picture)

Movement: Tommy was a Soldier. (sing and play follow the leader game).

Listen: Let's have a different sort of march now
Let's have a circus parade. (use "Comedians' Gallop" music for children to march, wave ribbons, do circus actions)
Show clown picture.

Conclusion: Show all three pictures to children.