Factors related to the amount of time children spend in leisure reading

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FACTORS RELATED TO THE AMOUNT OF TIME
CHILDREN SPEND IN LEISURE READING

BY

DOROTHY DOIG

A Thesis Submitted in Partial Fulfilment
of the Requirements for the Award of

Bachelor of Education (Honours)
at the School of Education, Edith Cowan University

Date of Submission: 30.1.92
USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.
The purpose of this study was to investigate the relationship between the amount of time children spend in leisure reading and the variables of reading achievement, reading attitude, amount of television viewed, access to interesting materials in the home, competing leisure interests and gender.

The subjects were 115 Year 6 children from 4 classes in Perth's northern suburbs.

Reading achievement was measured using PAT Comprehension and PAT Vocabulary, Form A, Part 5. The Elementary Reading Attitude Survey measured attitude to recreational reading and attitude to academic reading. The Leisure Activities Questionnaire provided information on the amount of time devoted to leisure reading, the amount of television viewed, out-of-school activities, reading materials and whether leisure reading could be increased.

The study was a correlational and comparative group design.

The results showed that there was a wide variation in the extent of recreational reading (ERR) and the mean was found to be 26 minutes per day. The best predictor of ERR was attitude to recreational reading (r=.514). There were significant positive correlations between ERR and both measures of attitude to reading and reading.
comprehension, and a significant negative correlation between ERR and the amount of television viewed. The multiple regression revealed that attitude to recreational reading, amount of television viewed and level of comprehension together accounted for 29.6% of the variance in ERR.

The t tests showed that there was no significant difference in ERR between (a) sufficient versus not sufficient access to interesting materials in the home, (b) participation versus no participation in organised out-of-school activities, and (c) boys versus girls.

The study indicated that children with a favourable attitude to reading, along with limited television viewing and competent reading ability are more likely to spend more of their leisure time in recreational reading. Fundamental to the desirable habit of leisure reading, is a favourable attitude to reading which can be developed by both the home and the school, through the provision of interesting reading materials and activities and opportunities to read for pleasure.
DECLARATION

"I certify that this thesis does not incorporate, without acknowledgement, any material previously submitted for a degree or diploma in any institution of higher education and that, to the best of my knowledge and belief, it does not contain any material previously published or written by another person except where due reference is made in the text".

Signature

Date

30. 1. 92
ACKNOWLEDGEMENTS

I wish to acknowledge the assistance of Dr Peter Sloan for his supervision of this thesis. I also wish to acknowledge the assistance of Dr Amanda Blackmore whose valuable advice on the statistical procedures and encouragement and support in the preparation of this thesis were greatly appreciated. I would also like to thank my family for their support, especially my son Ben, who helped me with the computer graphics used in this document.
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CHAPTER 1

INTRODUCTION

1.1 Statement of the Problem

Children's leisure reading is a sporadic activity with wide variations in the amount of time devoted to it (Greaney 1980, Greaney and Hegarty 1987 and Anderson, Wilson and Fielding 1988). From day to day, some children will not read at all, while at the other extreme, some children will spend a minimum of 3 hours a day reading for pleasure (Greaney and Hegarty 1987). The reasons for this variation are not well understood. Although it has been found that the amount of leisure reading is related to age, gender, reading ability, socio-economic status, teaching method, time devoted to television viewing and availability of reading materials, these relationships have not been very pronounced (Greaney 1980).

Furthermore, it is not certain whether, or to what extent, the pleasurable activities competing for children's free time are related to the amount of leisure reading. What is certain however, is that leisure reading is a complex phenomenon and that our understanding of it is inadequate (Greaney and Hegarty 1987). It is vital to further our understanding of the factors related to children's leisure reading in order to educate children appropriately in the establishment of good leisure reading habits.
1.2 Background of the Study

The present generation of children has access to more literature than any previous generation. Similarly, there are more recreational activities available which compete for its leisure time, including many sports, clubs, music, games, television, and in the last ten years or so, computer games and videos. The scope of these recreational activities must have an impact on children's lifestyles and affect the patterns of their leisure behaviour and the amount of time they spend in leisure reading, either positively or negatively. Some of these activities may distract children from reading. On the other hand, some may stimulate children to read more in order to satisfy their curiosity in areas of interest. Access to suitable reading materials is necessary to follow through the motivation to read, and the ease with which children can locate such materials must also affect their leisure reading habits.

When children choose to read during their leisure time, in preference to the many alternative activities which may be available, other factors must also contribute to their desire to read. Some of these factors may be personal, such as age, reading ability and reading attitude, and others may be environmental, for example, access to interesting reading materials and a quiet place to read. Different circumstances must shift the emphasis
on the various factors involved, for instance, when the weather precludes outdoor activities or if a new book is received as gift.

Another aspect of children's leisure reading is the imbalance between males and females in reading skills and habits (Greaney 1980 and Greaney and Hegarty 1987). Recent concerns about gender equity may have produced some measures which could help to restore a balance in this area.

The interrelationship of all of these factors does present a complicated picture of leisure reading and it is necessary to examine many variables simultaneously so that the patterns which typify children's leisure reading habits can be understood.

1.3 Purpose of the Study

The purpose of this study was to investigate the relationship between the amount of time children spend in leisure reading and reading achievement, reading attitudes, amount of television viewed, participation in organised out-of-school activities, availability of interesting materials in the home, and gender, in order to determine the significant factors which relate to the amount of time children spend in leisure reading.
1.4 **Significance of the Study**

How much time children spend at leisure reading, the uses to which they put reading and the value they place on reading are questions which carry serious implications for all concerned with the teaching of reading (Greaney, 1980). Recreational reading is an important part of any reading programme as it provides opportunities for children to practise their reading skills while expanding their experiential background and developing an understanding of their world.

To date, much of the educational research which has been conducted in the field of reading has focused on the development and assessment of reading proficiency as well as the problems underlying failure in learning to read. There has not been the same emphasis on leisure reading (Greaney, 1980) or the role of children's attitudes to reading (McKenna and Kear, 1990).

Because leisure reading can contribute to the development of reading skills as well as the enrichment of children's lives, the study of factors related to the amount of time children spend in leisure reading is worthy of investigation.
1.5 Definition of Terms

For the purposes of this study, the following terms were assigned the following definitions.

**Leisure**  Time free from work, school or home duties.

**Leisure Reading**  Reading which does not include any school-assigned reading or homework. It is purely reading voluntarily undertaken with the child’s free choice of materials. "Leisure reading", "recreational reading" and "voluntary reading" will be used interchangeably.

**Reading Achievement**  The level of performance on the Progressive Achievement Tests (PAT).

**Reading Attitude**  The level of performance on the Elementary Reading Attitude Survey (ERAS).

1.6 Research Questions

The present study was designed to investigate the following questions.

1. What is the extent of recreational reading of Year 6 children?

2. Is there a relationship between the extent of recreational reading and reading achievement?

3. Is there a relationship between the extent of recreational reading and reading attitude?

4. Is there a relationship between the extent of recreational reading and the amount of television viewed?
5. Is there a relationship between the extent of recreational reading and the availability of interesting reading materials in the home?
6. Is there a relationship between the extent of recreational reading and participation in organised out-of-school activities?
7. Is there a difference in the extent of recreational reading between boys and girls?

1.7 Overview of the Design of the Study

The research problem was investigated using correlational and comparative group designs. Three instruments were used to measure the variables of interest in this study. The first was the Elementary Reading Attitude Survey (McKenna and Kear, 1990) which measured attitude to academic and recreational reading. The second was the Progressive Achievement Tests of Reading (ACER, 1982) which measured the level of achievement in reading comprehension and reading vocabulary. The third was the Leisure Activities Questionnaire which was developed specifically for the present study and yielded data on the extent of recreational reading, amount of television viewed, competing leisure activities, availability of interesting reading materials in the home, source of reading materials and whether and how leisure reading could be increased.
1.8 Limitations of the Study

1.8.1 Accuracy of Data

The data collected on the Leisure Activities Questionnaire was self-reported. The subjects were Year 6 children and their perceptions of the amount of time they spent at leisure reading and in other leisure activities may have been difficult for them to assess accurately. Similarly, it may have been difficult for them to estimate the number of interesting reading materials in their homes. The reliability of the questionnaire, and the means of overcoming this problem, are discussed in detail in Chapter 4.

It was also considered to be too difficult a task for the children to remember their leisure activities for the entire weekend without the use of a diary. It was not feasible to include such an instrument in this study so no data were collected for these periods of leisure time. However, it should be noted that the study by Greaney (1980), indicated that the proportion of leisure time spent at reading varied from 4.6% for Sunday, to 5.8%, and 6.4%, for Tuesday and Thursday respectively. It is not known whether the small variation in the amount of leisure time spent at reading on Sunday is significant in the context of the overall proportion of 5.4% of leisure time spent at reading in the above study.
1.8.2 Generalisability of Findings

The children in the population sample were drawn from one year level. The school profiles indicated that these children were from low to middle socio-economic backgrounds. Children from different year levels and different socio-economic backgrounds may not exhibit the same reading and leisure behaviours as the children represented in the present study. Therefore, the findings of this study can only be generalised to Year 6 children from low to middle socio-economic backgrounds.

1.9 Plan of the Thesis

The investigation is reported according to the plan set out below.

Chapter 2 contains a literature review of the correlates of leisure reading. It covers the relationship between leisure reading and the home environment, competing leisure interests and the development of a favourable attitude towards reading.

Chapter 3 outlines briefly the theoretical considerations underpinning the study and states the hypotheses to be tested in the investigation.
Chapter 4 discusses the methodology of the study and includes a description of the sample, instruments, design and procedure employed.

Chapter 5 reports the results of the data analysis and whether the hypotheses were supported by the data.

Chapter 6 presents a discussion of the results in relation to the specific research questions as well as other findings which emerged from the data.

Chapter 7 contains the conclusions that are drawn from the findings of the study and the implications of the findings. Suggestions for further research in the area are also presented.
2.1 Correlates of Leisure Reading

Literature discussing the relationship between leisure reading and the home environment, competing leisure interests and the development of a positive attitude to reading will be reviewed in three main sections. The first section will deal with the impact of the home environment on the development of leisure reading habits of children. Secondly, the competition for time among other leisure pursuits, in particular, television, will be considered. The third section will examine the development of a favourable attitude towards reading in schools through the promotion and accessibility of attractive materials and activities. The aspect of accountability in the teaching of reading, where opportunities for recreational reading may be displaced for further skills development, will also be discussed. Finally, a brief summary will highlight the overall implications of the literature reviewed.

2.2 The Impact of the Home Environment

Findings by Greaney and Hegarty (1987) suggest that the amount of leisure reading is related to the existence of a positive educational home environment, and in particular, to the value placed on reading in the home. With regard to socio-economic status (SES) they state
that, although SES is a pervasive source of variance in educational achievement, its measures do little to explain how homes are effective or why there is a large variation in the amount of time devoted to leisure reading within individual SES categories. It appears that "...what parents do is more important than what parents are." (p.15)

Wilson and Moon (1991) conducted a study to ascertain the views of parents and teachers on how they might effectively support independent readers. After their study, they reported that their survey had increased interest in reading and literature amongst children and their parents. This resulted in active parental support of the school library and book fairs and a heightened awareness of their role in supporting their children's reading development. They derived the following features of parental support for independent reading:

"* the establishment of a time for reading,
* availability of a quiet, comfortable place for reading,
* encouragement for library membership,
* facilitating book ownership,
* knowledge about children's books,
* membership of children's book groups. " (p.2)

These factors are incorporated in Greaney's (1986) comprehensive summary, given below, of the ways in which
a positive home environment contributes to the development of reading skills and leisure reading.

**Verbal Interaction.** Verbal interaction helps develop linguistic cognitive skills important for reading.

**Interest in Reading.** Parents who are interested in reading contribute to a child's confidence and interest in reading.

**Parents' Reading.** Early readers tend to have parents who themselves read.

**Access to Reading Materials.** Presence of reading materials in the home was associated with reading achievement although mere availability does not ensure that the child will read.

**Opportunity for Reading.** Providing an appropriate atmosphere and opportunity encourages leisure reading.

**Parent-Child Reading.** Parental reading to the child can stimulate imagination and language development.

Greaney also identified the following factors which moderate parental influence on leisure reading.

**Age.** With increase in peer group influence, the extent of the relationship between home environment and leisure reading may decrease.

**Ordinal Position and Gender.** Parents tend to interact more with oldest children and may involve girls more than boys in school related activities.

**Personal.** Age, attitude to reading, reading ability, satisfaction derived from earlier leisure reading,
interests and friendships, and attractiveness of alternate leisure pursuits, appear to influence a child's willingness to devote leisure time to reading.

While Greaney (1986) asserts that the influence of parents should not be over-estimated, he clearly acknowledges the importance of their role in fostering reading. He suggests that parents and schools should ensure that young children's encounters with print are satisfying and pleasurable.

2.3 Competition From Other Leisure Pursuits

Enthusiasm for books generated at school may soon dissipate when competition from other leisure pursuits arises.

Dupart (1985) holds the view that parents and teachers should respect the leisure time of students. Her article discussed students 10 to 12 years old who were in a transitional stage of development. During this stage she suggests that parents and teachers should encourage the habit of leisure reading but they should not reproach children for not reading or suggest that reading be done as opposed to other leisure pursuits, especially watching television. She maintained that books and television were two different media and early positive experiences of reading would prevail and children would allocate time
for reading for pleasure naturally. She also mentioned that ownership of books was important and that leisure reading should not be interrupted.

It is significant that Telfer and Kann's (1984) suggestion that other types of reading and other media might take the place of leisure reading was not borne out in their correlational study of reading achievement, free reading, watching T.V., and listening to music. Some outcomes emerged that were anticipated and shown by previous research, such as the correlation between higher reading achievement and more time spent in reading for pleasure. Their results also showed that although students of all ages spent about the same total amount of time with electronic media, children in different grade levels distributed their time differently among the various media. Fourth and eighth grade students watched more television than eleventh grade students who spent significantly more time listening to music. Simultaneous reading and engagement with electronic media was about the same for all three grades but only in the eleventh grade did it appear not to show any detrimental effect on reading performance. Implications from the findings suggest that parents should be concerned about their children's listening and viewing habits and encourage younger children to read in areas away from the television. It is also suggested that teachers should seek ways to promote reading through these media.
The controversy over whether television influences reading skills, leisure reading and homework was also the focus of a study by Searles, Mead and Ward (1985). They used data gathered by the National Assessment of Educational Progress during its 1979-80 assessment of the reading skills of 9, 13 and 17 year olds across the United States. The survey included information on the children's television viewing habits, leisure time reading and homework. Their analyses suggested that age is a major factor in determining how much television students watch and how their television viewing interacts with reading skills. Television also appears to have a differential effect for students in different SES groups. They explained that television may provide external stimulation that younger children and members of disadvantaged groups are less likely to obtain on their own. It may also give vicarious experiences and broaden their vocabulary. However, for older and more advantaged students, television watching may interfere with time available for reading, homework and other activities. Thus the common expectation that television is a negative influence is not uniformly supported.

A common pattern to emerge from the data of both Telfer and Kann (1984) and Searles, Mead and Ward (1985) was the decline with age in both the amount of time spent watching T.V. and the amount of leisure reading. Greaney (1986) states that children experience "the reading
craze" (p.817) towards the end of primary school. This may account in part for the age-related phenomenon.

Anderson, Wilson and Fielding (1988) conducted an intensive study which examined the relationship between how children spend their time outside of school and their growth and proficiency in reading achievement. Their sample of 155 fifth grade students recorded how many minutes they spent on a wide range of activities over a period of from 8 to 26 weeks. In their analysis of the data to see whether other activities compete with book reading, they found that there was no strong evidence that any out-of-school activity interfered with book reading. Thus, their results would appear to support Dupart's (1985) relaxed and optimistic view, discussed above, that early positive experiences of reading would prevail and children would allocate time to reading for pleasure naturally.

Anderson et al. (1988) also reported there were small but significant positive associations between the amount of book reading and doing chores, doing homework and reading comic books. They also mention that girls read more than boys. This finding is more strongly stated by Greaney and Hegarty (1987). Their study indicated that even after consideration is made for the differences between students in terms of attitude, motivation and home support for reading, girls were more likely to spend
leisure time reading than boys. This is consistent with the findings of Greaney (1980) who found that the two variables which emerged as strong predictors of leisure reading were gender and reading attainment.

Anderson et al. (1988) also found that reading books was a strong predictor of several measures of reading achievement and that there was a wide variation between children in the amount of book reading done. Most children on most days did little or none while on the other hand, a child at the 98th percentile read for an average of 90 minutes per day. Similarly, Greaney and Hegarty (1987) found that book reading during leisure time was a relatively sporadic activity. Factors such as the availability of suitable reading material, current interests and friendships, weather conditions, time of year, amount of homework or housework, local events and television programmes greatly influenced the daily amount of leisure reading. In their survey, 7.2% of the children's leisure time was devoted to reading for pleasure.

2.4 The Development of a Favourable Attitude Towards Reading

McKenna and Kear (1990) state that:

The recent emphasis on enhanced reading proficiency has often ignored the important role played by children's attitude in the process of becoming
literate. (p. 625)

Morrow (1985) reported that observational studies and surveys suggest that a factor accounting for the low level of voluntary reading among children may be that many reading programs are skills oriented and provide little systematic opportunity for students to read for enjoyment. Morgan (1984), cited in Greaney and Hegarty (1987), also believes that the skills aspect of reading should not be overemphasised. The less the pupils regard the activity of reading as a means of attaining certain cognitive goals, the more likely they are to develop favourable attitudes to reading.

Fowler (1988) asserts that children's lifestyles are over-stimulated through the "explosion of technology" and little time is left for recreational reading. He states that "'Reading as a pastime' is basic to creativity and intellectual mind expansion." (p. 2). He sees its decline as a sacrifice in favour of trying to keep up the hectic pace and forge ahead in society.

His viewpoint that time for recreational reading in schools should not be cut to allow for further skills programs would appear to be supported by the results reported by Collins (1980, cited in Anderson, et al, 1988, p. 300). Collins conducted an experimental study with matched classes from second to sixth grade and found that students who did sustained silent reading moved faster through their basal readers. In addition, they
showed no decline in their spelling and English test scores even though they gave up as much as half an hour per day of instruction in spelling and English for silent reading.

Fowler's concern is shared by Tobin (1986). She suggests that the demand for accountability in schools can lead to an emphasis on skills to the detriment of developing a joy of reading. Tobin feels that the responsive and creative elements of reading could become elusive in classrooms and some children will fail to make the link between reading instruction and reading for pleasure. She states that children's literature plays a crucial role in bridging the gap and needs to be promoted by teachers and teacher librarians. She describes how the West Australian Young Readers' Book Award has helped nurture and secure the commitment of children to the reading of quality fiction for pleasure.

Hunter-Grundin (1990) believes that when the classroom library is the core of the literacy-learning curriculum, young children will learn not only how to read but also why they should learn to read. Provision of a rich variety of books will enable the children to develop the understanding that learning the complex code of written language is worth the effort.
This emphasis is obvious in research by Hill (1984), who surveyed 413 children from 17 different classrooms and found that 41.3% of books read over a 10-week period were borrowed from the class library and 29.1% from the school library with public libraries providing 7.1%. The children owned 16.4% of the books read, 4.0% were borrowed from a friend and 2.1% from a brother or sister. It also indicated that classes who read twice as many books as other classes had extensive classroom libraries.

Results from a study by Morrow (1985) also indicated that voluntary reading could be increased through programs heavy in literary activities, supported by well designed classroom library corners. The activities included reading to the children daily, encouraging them to read to each other and discussion and sharing of books read. Manning and Manning (1984, cited in Anderson et al. 1988, p.300) in their year long study to compare different approaches for increasing the amount of children's reading, found that approaches which emphasize peer interaction and individual teacher-student conferences produced significantly better attitudes than the control condition of the traditional sustained silent reading approach. Also, the peer interaction group produced significant gains on a reading test.

Generally, teachers are convinced of the importance of recreational reading, yet many classroom practices and
activities have not produced students with an interest in books. Wiesendanger and Bader (1989) assessed students' perceptions of whether commonly used rewards, motivational activities and extra assignments actually encourage them to read. They found that competition and accountability for books read did not encourage and could crush the desire to read. In addition, it was found that students were most stimulated to read books about which the teacher had sampled and communicated some information on the content.

Anderson et al. (1988) found that the teacher has a significant influence on the amount of book reading children do out of school. This influence is substantial, as the class that read the most averaged 16.5 minutes per day, whereas the class that read the least averaged only 4.1 minutes per day.

Book selection is a crucial factor in the maintenance of recreational reading habits. Parham (1988) acknowledged that locating good reading material is often difficult for children. He suggested that teachers investigate the use of a computer database program which helps children find books which match their interests.

In Hill's (1984) previously mentioned study, content was the reason for children's choice of books 24.85% of the time and recommendation 14.1% of the time. It is
important to note that 61.3% of the children in this survey discussed their books with no one, 18.9% discussed them with their friends, 8.5% with parents and, disturbingly, only 4.3% with their teachers.

Results from research by Anderson, Higgins and Wurster (1985) showed that high, average and low achievers seek out and avoid the same content categories as each other. Interest is more important than readability. However, poor readers cannot sustain the interest to complete a book when difficulty with readability and length overtake them. Poorer readers need help from knowledgeable adults to make appropriate choices.

Smith and Joiner (1990), however, found that recreational reading level varies greatly and frequently and because reading for pleasure is so personal, they suggest that it is inappropriate to recommend a difficulty level at which a child should limit his choice of recreational reading material.

In summary, it seems important for schools to provide children with easy access to interesting materials and the opportunity for peer interaction and teacher-student conferences about what they are reading. Greaney and Hegarty (1987) point out that a child's attitude to reading can be altered by both parents and teachers by providing suitable reading materials and activities and
opportunities to read for pleasure. Their data clearly underscore the importance of a favourable attitude towards reading which is fundamental to the development of the habit of leisure reading.

2.5 Summary

In this review, the impact of the home environment has been examined and the qualities and moderating factors influencing reading development and leisure reading habits were described. Competition from other leisure pursuits, in particular, television viewing, and the sporadic nature of recreational reading were discussed. The development of a favourable attitude towards reading in schools was examined and there was evidence to indicate that communication and access to suitable materials is crucial. Furthermore, accountability in schools can lead to an over-emphasis on reading skills to the detriment of developing a joy of reading.

In conclusion, as described by Greaney and Hegarty (1987, p.17)

...the relationship between the value placed on reading in the home and the amount of children's book reading may have been overstated in the past, and that personal characteristics such as attitudes, needs and motivations may have been understated.
Further research focusing on the above personal characteristics is warranted, considering the potential contribution leisure reading could make to the development of reading proficiency.
CHAPTER 3

THEORETICAL POSITION AND DERIVATION OF HYPOTHESES

3.1 Theoretical Position

The study was designed to investigate the factors related to the amount of time children spend in leisure reading. The following theoretical considerations which underpin the study were derived from the theoretical issues discussed in the review of related literature.

1. Children's leisure reading is a sporadic activity with wide variations in the amount of time devoted to it.

2. The existence of a positive educational home environment supports the development of the habit of leisure reading.

3. A favourable attitude to reading is fundamental to the development of the habit of leisure reading.

4. Many factors influence a child's willingness to devote leisure time to reading. They include the child's age, gender, socio-economic status, reading ability, attitude to reading, teaching method, availability of suitable reading materials, attractiveness of alternative leisure pursuits and television viewing habits.

In this thesis, the variables of reading ability, reading attitude, amount of television viewed,
availability of interesting reading materials in the home, participation in organised out-of-school activities, and gender, were selected to investigate their relationship with the amount of time children spend in leisure reading.

3.2 Hypotheses

From the above position, the following hypotheses were generated. The corresponding research questions are shown in Chapter 1.

**Hypothesis 1**
There will be a positive relationship between the extent of recreational reading and the level of reading achievement of Year 6 children.

**Hypothesis 2**
There will be a positive relationship between the extent of recreational reading and the reading attitude of Year 6 children.

**Hypothesis 3**
There will be a negative relationship between the extent of recreational reading and the amount of television viewed by Year 6 children.
Hypothesis 4
There will be a significant difference in the extent of recreational reading of those Year 6 children who have sufficient access to interesting reading materials in their homes and those Year 6 children who do not.

Hypothesis 5
There will be a significant difference in the extent of recreational reading between those Year 6 children who participate in organised out-of-school activities and those Year 6 children who do not.

Hypothesis 6
There will be a significant difference in the extent of recreational reading between boys in Year 6 and girls in Year 6.
CHAPTER 4

METHODOLOGY

4.1 Subjects
The sample for this study consisted of four Year 6 classes in three neighbouring schools in Perth's northern suburbs. The children's ages ranged from 10 years 5 months to 12 years 2 months with a Mean of 11 years 1 month and standard deviation of 4 months. There were 115 children participating in the study, of which 67 were boys and 48 were girls.

4.2 Instruments
Three instruments were used to measure variables in this study and demographic data were recorded on the answer sheets of these instruments.

4.2.1 Elementary Reading Attitude Survey (ERAS)
This survey was developed by McKenna and Kear in 1990. It is comprised of 20 items which fit two separate subscales for recreational and academic reading. It has a large-scale normative frame of reference. Reported Cronbach's alpha reliability coefficients range from .74 to .89 and there is evidence of the subscales' validity in that scores varied predictably with the outside criteria of library membership, television viewing and reading ability. The survey has natural appeal to
children because of its pictorial format (see Appendix 2), and it is simple to administer to a group.

4.2.2 The Progressive Achievement Tests of Reading (PAT)
The PAT tests are standardised reading tests which measure general level of word knowledge and skill in comprehension and interpretation of prose material. They are normed for each grade (2-10) in each Australian state.

PAT is comprised of two equivalent reading vocabulary tests and two equivalent reading comprehension tests (Forms A and B). The reported correlation co-efficients between the vocabulary and comprehension tests range from 0.79 to 0.86.

The reliability of the tests was assessed using the Kuder-Richardson formula 20. The reported KR 20 coefficients for Form A, Part 5 are .89 and .94 for comprehension and vocabulary respectively.

Form A, Part 5, for Grade 6 was used in this study. Graded passages were read silently from the test booklet and multiple choice answers were recorded on an answer sheet. Thus, it was highly suitable for group administration.
4.2.3 Leisure Activities Questionnaire (LAQ)

This instrument was developed specifically for the present study. A copy of the questionnaire appears in Appendix 1.

The questionnaire was designed to extract the following information:

(a) the extent of recreational reading,
(b) the extent of television viewing,
(c) participation in organised out-of-school activities,
(d) availability of interesting reading materials in the home,
(e) the source of the reading materials, and
(f) whether and how the amount of recreational reading could be increased.

There were seven questions in all and the subjects responded by placing a tick in the appropriate box or boxes. In Questions 1, 2, 6, and 7, one or more responses were acceptable. In Questions 3, 4, and 5, there were mutually exclusive categories which required only one response.

The questions were deliberately ordered so that the children's memories were initially aroused about the previous day's leisure activities in Question 1. The categories listed both organised and non-organised activities as well as an "other" category which could be specified by the respondent.
The categories in Question 1 were taken from informal observation and discussion with school children and a review of related literature. Questions 2, 3, 4, and 5 then focused specifically on the other variables of interest in the study, namely, the extent of recreational reading, the extent of television viewing and the availability of interesting reading materials in the home.

The amount of television viewed included video programmes. Video recordings greatly increase the availability of programmes which are attractive to the children and allow repeated viewings of favourite programmes.

To enrich the data, a question on the source of the reading materials was included and finally, a question as to whether and how recreational reading could be increased.

It was envisaged that each question would need to be carefully explained in order that the responses be as accurate as possible. It was considered that the term "voluntary reading" would convey to the children a more specific meaning than "recreational reading" which could possibly include school-assigned recreational reading. This term conveyed the notion of reading undertaken of the child's own free will, with his or her own choice of
reading materials, as distinct from any reading resulting from intervention.

4.2.4 Reliability of the LAQ

The self-reporting of the data in the LAQ is considered to be a limitation of this study. The subjects were Year 6 children and their perceptions of the amount of time they spent at leisure reading and other leisure pursuits may have been difficult for them to assess accurately. Similarly, it may have been difficult for them to estimate the number of interesting reading materials in their homes. Therefore, the LAQ was administered on three occasions within a space of three weeks.

The test-retest reliability of the questionnaire revealed that correlations between the three sets of data collected were as follows.

1. The amount of time spent in leisure reading:
   between LAQ 1 and LAQ 2, was $r = .77$,
   between LAQ 1 and LAQ 3, was $r = .56$, and
   between LAQ 2 and LAQ 3, was $r = .26$.

These correlations are moderate, except for .26, which is low. Upon examination of the data, to see whether late-night shopping on a Thursday evening or other activities or popular television programmes were prominent on these particular questionnaires, there was no apparent reason to account for this low correlation.
2. The amount of time spent viewing television:
   between LAQ 1 and LAQ 2, was $r = .63$,
   between LAQ 1 and LAQ 3, was $r = .56$, and
   between LAQ 2 and LAQ 3, was $r = .54$.
   All of these correlations are moderate.

3. The number of interesting books in the home:
   between LAQ 1 and LAQ 2, was $r = .75$,
   between LAQ 1 and LAQ 3, was $r = .65$, and
   between LAQ 2 and LAQ 3, was $r = .71$.
   All of these correlations are moderate.

In order to overcome the problem of unreliability, the
LAQ was administered three times and the questionnaire
which recorded the median amount of time spent in leisure
reading was chosen for the main analysis of data. For
example, if a child reported reading for 30 minutes in
LAQ 1, 15 minutes in LAQ 2, and 60 minutes in LAQ 3, then
LAQ 1 would be chosen as the most representative of that
child's leisure time reading.

4.3 Design

The research problem was investigated using correlational
and comparative group designs.

4.3.1 Correlational Design

A correlational design was used to investigate whether
and to what degree a relationship existed between the
Extent of Recreational Reading and the other variables of
interest (Reading Achievement, Reading Attitude and
Minutes of Television Viewed), through computing of correlations between paired scores.

4.3.2 Comparative Group Design
A comparative group design was selected for this study because the researcher was attempting to determine whether there were any differences in the phenomenon under investigation, namely, the Extent of Recreational Reading (dependent variable), between groups, differing on certain characteristics (independent variables).

In this study, the comparison groups differed on
(a) access versus no access to interesting materials in the home,
(b) participation versus no participation in organised out-of-school activities, and
(c) gender.
In this design, all of the variables under investigation occurred naturally and were not manipulated or determined by the researcher.

4.4 Procedure
4.4.1 Access
Approval was obtained from the Ministry of Education and the schools' principals to conduct research in their schools. In response to a letter sent home explaining the study, and assuring confidentiality, the written permission of the parents of the subjects was obtained.
Confidentiality was guarded because the individuals' names were not used in the discussion of results and the results obtained from individual children were not discussed with other people.

4.4.2 Organisation

Meetings were held with the class teachers to explain fully the extent of the testing programme. Arrangements were made which were mutually acceptable to both the classes and the researcher and timetables were drawn up. The testing programme coordinated two classes at a time and the data collection period occurred at the end of second term and the beginning of third term. All testing was conducted in the familiar surroundings of the children's own classrooms. The class teachers were inconspicuously present most of the time and took no part in the testing programme, apart from the initial introduction of the researcher to the children.

In order to increase the reliability of the questionnaire, and for test-retest reliability, it was administered three times because children may read for a different amount of time on different nights of the week, depending on other activities. The median score of the three was taken as the estimate of the extent of recreational reading for each child and was used in the main analysis of the data.
It was considered to be too difficult a task for the children to remember their leisure activities for the entire weekend so the format of the questionnaire did not include these extensive periods of leisure time. Therefore, it could not be given on a Monday to collect data for Friday, Saturday or Sunday.

4.4.3 Data Collection

In order to establish a positive rapport with the children, it was decided to administer the Elementary Reading Attitude Survey first. It was given early in the first week, immediately after the lunch period. At the end of this week, the LAQ 1 was given. The children were not forewarned about the administration of the questionnaire so that their responses would not be distorted in an attempt to please the teacher. Each question was read aloud to the class and explained fully before responses were recorded. As much time as was needed was allowed to answer any queries pertaining to the questions and any doubts as to what the categories encompassed were clarified. A television guide was available so that the children could check the previous day's programs to jog memories where necessary.

The term "voluntary reading" was very carefully explained so that the children fully understood that it was reading undertaken of their own free will with their own choice
of materials, as distinct from any school-assigned homework or required reading.

In the second week, the LAQ 2 was given on a different day of the week. Again, the questions were read twice to the children and sufficient time was allowed to deal with any queries. This was followed by the PAT Comprehension Test on the Friday morning of this week.

In the third week, the LAQ 3 was administered. Again, this was done on a different day of the week to the previous two, with no restriction on the amount of time or discussion allowed to clarify questions. On the Friday morning of this week, the PAT Vocabulary Test was administered. Both PAT Tests were administered strictly in accordance with the directions in the Teachers' handbook.

Where possible, any children who were absent during the testing programme were followed up individually at mutually convenient times. A complete set of data was collected from all but three of the subjects, who failed to complete LAQ 3. For these subjects, the LAQ to be used to yield the estimate of the extent of recreational reading was randomly chosen by the toss of a coin.

In scoring the LAQ, numerical values were obtained for Questions 2, 4, and 5 and Questions 3, 6 and 7 yielded positive or negative responses for all of the categories.
The leisure activities in Question 1 were sorted only to determine whether or not the child participated in organised out-of-school activities.
CHAPTER 5

RESULTS

In this chapter, the frequency distribution and descriptive statistics for the Extent of recreational reading (ERR) will be described. The computed correlations between ERR and the variables of reading achievement, reading attitude, and amount of television viewed will be analysed. A Stepwise Multiple Regression of these variables will also be discussed. Following this, each hypothesis will be discussed. Other results which were obtained will be presented and finally, a summary of the results will be given.

5.1 Frequency Distribution

The Extent of Recreational Reading (ERR) across the sample is shown in Figure 5.1. This graph also indicates the percentage of children in each category.

The highest category of 61+ minutes was converted to 75 minutes to make the intervals equal for the computing of the descriptive statistics and further analyses.

The mean ERR for the sample was 26 minutes. Figure 5.1 indicates that the amount of time spent in recreational reading is a non-normal distribution which is positively skewed. That is, there are more extreme scores at the
upper end of the distribution. Thus, the mean (26) is greater than the median (15) and the mode (15). In this case, although most children read for between 1 and 15 minutes and a large number did not read at all, there were some children who read for considerably longer periods of time.

Figure 5.1: ERR and Percentage of Children in Each Category

5.2 Correlations

Since the data on the variables of ERR, Reading Achievement (PAT Comprehension and PAT Vocabulary), Reading Attitude (ERAS Recreational and ERAS Academic) and Minutes of Television Viewing (MTV) were measured in
interval scales, the appropriate technique to determine the relationship between the variables was the product moment correlation coefficient or Pearson's r. Table 5.1 presents the correlation coefficients of the variables in a correlation matrix.

Table 5.1: Correlation Matrix of Variables of Reading Achievement, Reading Attitude and Television Viewing.

<table>
<thead>
<tr>
<th></th>
<th>ERR</th>
<th>Comp</th>
<th>Voc</th>
<th>Rec</th>
<th>Acad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comp</td>
<td>0.233*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voc</td>
<td>0.187</td>
<td>0.679***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rec</td>
<td>0.514***</td>
<td>0.238*</td>
<td>0.180</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acad</td>
<td>0.330***</td>
<td>0.138</td>
<td>0.140</td>
<td>0.720***</td>
<td></td>
</tr>
<tr>
<td>MTV</td>
<td>-0.306**</td>
<td>-0.080</td>
<td>-0.104</td>
<td>-0.348***</td>
<td>-0.160</td>
</tr>
</tbody>
</table>

(df=100); * p<.05; (r=.185); ** p<.01; (r=.254) *** p<.001; (r=.321)

Examination of Table 5.1 shows that ERR was found to have a stronger relationship (0.514) with attitude to recreational reading than with any other variable in the study. Both measures of attitude to reading showed a positive relationship with ERR (Rec 0.514, Acad 0.330). There was a weak positive relationship with reading
comprehension (0.233). There was a weak negative relationship with the amount of television viewed (-0.306). This means that the more television is viewed, the less recreational reading the child does, and vice versa. A moderately strong positive relationship was found between reading comprehension and reading vocabulary (0.679) and a weak positive relationship with the measures of reading attitude (Rec 0.238, Acad 0.138). Despite the fact that the amount of television viewed related to ERR, there was no significant relationship found between reading comprehension and the amount of television viewed (-0.080). There was no significant relationship between reading vocabulary and ERR or between any measures of reading attitude and the amount of television viewed.

As expected, the intercorrelations between the measures of reading attitude were extremely high (Rec/Acad 0.720, Rec/Full Scale 0.920, Acad/Full Scale 0.934). There were weak negative relationships between reading attitude and the amount of television viewed indicating that the more positive the attitude to reading, the less television was viewed. However, this is only a weak relationship. Note that the amount of television viewed correlated negatively with all of the other variables in the study.
5.3 Stepwise Multiple Regression with forward selection

Since a combination of variables usually results in a more accurate prediction than any one variable, a multiple regression uses variables which are known to individually predict (correlate with) the criterion to make a more accurate prediction. The criterion was ERR and the predictors were attitude to recreational reading (Rec), attitude to academic reading (Acad), amount of television viewed (MTV), PAT comprehension (Comp) and PAT vocabulary (Voc). The purpose of the multiple regression was to try to account for as much variance in ERR as possible, using the predictors listed above.

In the Stepwise Multiple Regression with forward selection, the first step involved determining which predictor accounted for the most variance in ERR. In this case, attitude to recreational reading accounted for the most variance in ERR (see Figure 5.2). From Table 5.1, it can be seen that the correlation coefficient for Rec is 0.514 which is the most highly correlated variable with ERR.

Step 2 of the multiple regression involved determining which predictor accounted for the most variance in ERR, once the variance due to attitude to recreational reading had been removed. Since Rec and Acad are highly correlated with each other (r=0.720), some of the variance in ERR due to attitude to reading is shared by
these two predictors. When the variance in ERR due to Rec was removed (including the shared variance), the amount of variance left which was due to Acad alone, was less than the variance in ERR due to MTV, even though the correlation between ERR and Acad is higher than the correlation between ERR and MTV (see Table 5.1).

The correlation coefficient for MTV is -0.306. It does not matter whether \( r \) is a positive or a negative number, only how large it is, in order to indicate a relationship significantly different from zero. Positive and negative correlations are equivalent in terms of the strength of relationship between two variables.

Step 3 of the multiple regression involved determining which predictor accounted for the most variance in ERR, once the variance in ERR due to Rec and MTV had been removed. This predictor was PAT comprehension. Table 5.1 indicates that the correlation coefficient for Comp is 0.233.

After these three predictors were entered into the multiple regression, no other predictors accounted for a significant proportion of the variance in ERR. These three predictors together accounted for 29.6\% of the variance in ERR.
Figure 5.2: Stepwise Multiple Regression with Forward Selection Diagram
5.4 Testing of Hypotheses

5.4.1 Hypothesis 1

Hypothesis 1 stated that there will be a positive relationship between ERR and the level of reading achievement of Year 6 children.

Data were collected on two measures of reading achievement, namely, PAT Comprehension and PAT Vocabulary. Performance on PAT Comprehension correlated 0.233 with ERR (See Table 5.1). This indicates a weak positive relationship. To determine whether this coefficient represents a significant relationship, at the given significance level of .05, with 100 degrees of freedom, it must be equal to or greater than the table value of .195. There is a statistically significant relationship because $r = .233 > .195$. Thus, a significant positive relationship exists between ERR and PAT comprehension at the .05 level. There was no significant relationship with performance on PAT vocabulary and ERR.

In conclusion, there is evidence that the level of reading achievement in comprehension, but not vocabulary, is significantly positively related to the extent of recreational reading of Year 6 children. Thus, Hypothesis 1 is supported by the data.
5.4.2 Hypothesis 2

Hypothesis 2 stated that there will be a positive relationship between the extent of recreational reading and the reading attitude of Year 6 children.

Two separate measures of reading attitude were obtained from the Elementary Reading Attitude Survey (ERAS). These were attitude to recreational reading (Rec) and attitude to academic reading (Acad). The correlation coefficient for ERAS (Rec) was 0.514 (See Table 5.1). This indicates that there is a positive relationship between ERR and ERAS (Rec). It was determined that this is a significant relationship at the .001 level. The correlation coefficient for ERAS (Acad) was 0.330 (See Table 5.1) which also indicates a significant positive relationship with ERR at the .001 level.

Thus, with both measures of reading attitude reflecting a significant positive relationship with ERR, Hypothesis 2 is supported by the data.

5.4.3 Hypothesis 3

Hypothesis 3 stated that there will be a negative relationship between the extent of recreational reading and the amount of television viewed by Year 6 children.

The amount of television viewed ranged from 0 minutes to 360 minutes. The mean was 157 minutes and the standard
deviation was 99.54 minutes which indicated that there was a large degree of variability in the scores (see Figure 5.3). The amount of television viewed correlated \(-0.306\) with ERR (see Table 5.1) which indicates a weak negative relationship at the .01 level. Therefore, a significant negative relationship exists between ERR and MTV, which means that the more time that is spent in television viewing, the less time is spent in recreational reading, and vice versa. Thus, Hypothesis 3 is supported by the data.

![Figure 5.3: Minutes of Television Viewed](image)
Hypothesis 4 stated that there will be a significant difference in the extent of recreational reading of Year 6 children who have sufficient access to interesting materials in their homes and those who do not. The Leisure Activities Questionnaire (Appendix 1) asked the subjects whether they would do more voluntary reading if they had more interesting books. There were 80 children who answered yes (Group 1) and 35 who answered no (Group 2). Therefore, 80 children considered that they did not have sufficient access to interesting materials in their homes. The mean of Group 1 was 24 minutes and the mean of Group 2 was 31 minutes.

A two tailed t test for independent samples was used to determine whether there was a significant difference between the means of these two groups. The resulting t value determines whether the observed difference between the means is larger than the difference that would be expected by chance. There was no significant difference between the groups, $t(113) = 1.2, p > .05$. Hypothesis 4 is not supported by the data.
5.4.5 Hypothesis 5

Hypothesis 5 stated that there will be a significant difference in the extent of recreational reading between those Year 6 children who participate in organised out-of-school activities and those who do not.

Data were collected on the out-of-school activities of the subjects in the Leisure Activities Questionnaire in Question 1. The following categories were considered to be organised activities because they were regulated for the child in terms of frequency of participation, duration, rules of operation and membership.

After School Care       Sports Training
Club                   Lessons

The remaining categories were deemed to be not organised as participation was unstructured or irregular.

Stayed Home       Shopping       Visiting       Music-Radio/Tape
Homework           Computer       Hobby

The "Other" category was classified according to the specified activity, for example, "rode my bike" would be classified as not organised.

There were 30 children (Group 1) who participated in organised out-of-school activities and 85 children (Group 2) who did not. The mean ERR of Group 1 was 24 minutes and for Group 2 was 27 minutes.
The two tailed $t$ test for independent samples was selected to test the significance of the difference between these two means. There is no significant difference between the groups, $t (113) = .60, p > .05$. Hypothesis 5 is not supported by the data.

5.4.6 Hypothesis 6

Hypothesis 6 stated that there will be a significant difference in the extent of recreational reading between boys in Year 6 and girls in Year 6.

There were 67 boys participating in the study and the mean ERR for boys was 23 minutes. There were 48 girls participating in the study and the mean ERR for girls was 30 minutes.

To determine whether there was a significant difference between the means of these two groups, the two tailed $t$ test for independent samples was applied. Although the mean ERR for the girls was higher, the calculated $t$ is not large enough to indicate a significant difference between the means of the two groups, $t (113) = 1.45, p > .05$. Hypothesis 6 is not supported by the data.
5.6 Other Results

5.6.1 Recreational Reading and Homework

One of the out-of-school activities listed in the Leisure Activities Questionnaire (see Appendix 1) was homework. A very large proportion of the children who did homework also did some recreational reading and a large number of children who did not do homework, did spend some time doing recreational reading. On the other hand, there were very few children who did homework but did not do any recreational reading. In the fourth category were the children who did neither reading nor homework (see Table 5.2).

Table 5.2: Recreational Reading and Homework

<table>
<thead>
<tr>
<th>Homework</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>37</td>
<td>7</td>
<td>44</td>
</tr>
<tr>
<td>No</td>
<td>48</td>
<td>23</td>
<td>71</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>30</td>
<td>115</td>
</tr>
</tbody>
</table>
A chi square analysis revealed the relationship between the two variables, $\chi^2 (1, N=115) = 3.83, p > .05$. Since the critical $\chi^2$ is 3.84, this result is on the border of being significant. This suggests that children who do homework are more likely to engage in recreational reading than children who do not do homework but this result would need to be confirmed or refuted by further research.
5.5.2 Number of Books in the Home

The Leisure Activities Questionnaire (Appendix 1) asked the children to estimate the number of books which they had at home that they like to read. Table 5.3 shows the number of children in each category.

<table>
<thead>
<tr>
<th># Books</th>
<th>0</th>
<th>1-5</th>
<th>6-10</th>
<th>11-15</th>
<th>16-20</th>
<th>21+</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>2</td>
<td>14</td>
<td>16</td>
<td>12</td>
<td>10</td>
<td>81</td>
</tr>
</tbody>
</table>

The highest category of 21+ books was converted to 25 books to make the intervals equal for the computing of the descriptive statistics and further analyses. This category was chosen by 53.0% of children. Only 2 children (1.7%) indicated that they had no books at home that they liked to read. The number of books in the home correlated .250 with ERR. This was found to be significant at the .05 level.
5.5.3 Source of Books

Examination of Table 5.4 shows some notable comparisons in the sources of the children's books.

Table 5.4 Source of Books

<table>
<thead>
<tr>
<th></th>
<th>Own</th>
<th>Family</th>
<th>Friends</th>
<th>Class Lib</th>
<th>School Lib</th>
<th>Public Lib</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>109</td>
<td>60</td>
<td>24</td>
<td>33</td>
<td>82</td>
<td>65</td>
</tr>
</tbody>
</table>

The home appears to be the most common source of books for the children, with 94.8% of children reading their own books and 43.5% using family books. Outside the home, the school library supplies 71.3% of the children with books and 47.8% use a public library. The class library (or book corner) was used by 28.7% of the children. Friends are the least used source of books (20.9%).
5.5.4 Increasing Recreational Reading

The Leisure Activities Questionnaire (Appendix 1) asked the children what would make them want to do more voluntary reading. There were four categories, namely, (a) More interesting books, (b) More time to read, (c) A quiet place to read, (d) Nothing.

Table 5.5 shows the number of children in each category.

Table 5.5: What would make you want to do more voluntary reading?

<table>
<thead>
<tr>
<th></th>
<th>More Interesting Books</th>
<th>More Time To Read</th>
<th>A Quiet Place</th>
<th>Nothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>80</td>
<td>59</td>
<td>59</td>
<td>15</td>
</tr>
<tr>
<td>No</td>
<td>36</td>
<td>66</td>
<td>66</td>
<td>100</td>
</tr>
</tbody>
</table>

A large number of children indicated that they would read more if they had more interesting books (69.6%). It was found in testing Hypothesis 4 that there was no significant difference in the extent of recreational reading of Year 6 children who have sufficient access to
interesting materials in the home and those who do not. However, the number of books in the home correlated significantly (though not highly) with ERR. (see 5.5.2).

Having either more time to read and/or a quiet place to read would make 51.3% of the children want to read more.

It appears that most of the children (87%) would like to do more recreational reading, depending upon one or more of the above reasons.

There were 15 children who answered that nothing would make them want to do more voluntary reading. However, this was not necessarily a negative response to reading in all cases. One child qualified his answer by writing, "I already love reading". Other children commented at the time that they already did lots of reading. Of the 15 children in this group, 9 had done no reading.

To determine whether the means of Group 1 (the 15 children who would not like to do more voluntary reading) were significantly different to the means of Group 2, (the 100 children who would like to do more voluntary reading) t tests for independent samples were applied to the data on:

(i) attitude to recreational reading,
(ii) attitude to academic reading, and
(iii) level of comprehension.

Group 2 (M=30) had a significantly better attitude to recreational reading than Group 1 (M=24),
\[ t(16) = 3.22, p < .01. \]

Group 2 (M=27) had a significantly better attitude to academic reading than Group 1 (M=21),
\[ t(16) = 2.85, p < .05. \]

There was no significant difference between the mean of Group 1 (17) and the mean of Group 2 (18) in level of comprehension,
\[ t(21) = 0.93, p > .05. \]

5.6 Summary of Results

5.6.1 ERR

The distribution of ERR across the sample was positively skewed and the mean was 26 minutes.

5.6.2 Correlations

ERR was significantly positively related to attitude to recreational reading \( (r=.514, p<.001) \), attitude to academic reading \( (r=.330, p<.001) \) and reading comprehension \( (r=.233, p<.05) \). There was a significant negative relationship between ERR and the amount of television viewed \( (r=-0.306, p<.01) \) and amount of television viewed correlated negatively with all of the other variables in the study. There was no significant relationship between reading vocabulary and ERR or any of the measures of reading attitude or amount of television viewed.
5.6.3 Multiple Regression

The multiple regression revealed that attitude to recreational reading, amount of television viewed and level of comprehension together accounted for 29.6% of the variance in ERR.

5.6.4 Testing of Hypotheses

Hypothesis 1

There was evidence that the level of reading achievement in comprehension, but not vocabulary, is significantly positively related to ERR of Year 6 children. Therefore Hypothesis 1 was supported by the data.

Hypothesis 2

Both measures of reading attitude reflected a significant positive relationship with ERR. Therefore Hypothesis 2 was supported by the data.

Hypothesis 3

A significant negative relationship existed between ERR and the amount of television viewed. Therefore Hypothesis 3 was supported by the data.

Hypothesis 4

There was no significant difference in ERR between Year 6 children who have sufficient access to interesting
reading materials in the home and those who do not. Therefore Hypothesis 4 was not supported by the data.

**Hypothesis 5**

There was no significant difference in ERR between Year 6 children who participate in organised out-of-school activities and those who do not. Therefore Hypothesis 5 was not supported by the data.

**Hypothesis 6**

There was no significant difference in ERR between boys in Year 6 and girls in Year 6. Therefore Hypothesis 6 was not supported by the data.

**5.6.5 Other Results**

**Recreational Reading and Homework**

The study suggested that children who do homework may be more likely to engage in recreational reading than children who do not do homework.

**Number of Books in the Home**

The number of books in the home was significantly positively related to ERR.

**Source of Books**

The most common source of books was the home followed by the school library, public library and class library while friends were the least used source of books.
Increasing Recreational Reading

Most of the children in the sample (87%) indicated that they would like to do more recreational reading depending on one or more of the following reasons:
(a) if they had more interesting books,
(b) if they had a quiet place to read,
(c) if they had more time to read.

There was a significant difference between the means of those children who did not want to do more voluntary reading and those who did, in both attitude to recreational reading and attitude to academic reading. However, there was no significant difference between the means of these two groups in level of comprehension.
In this chapter, the results of the study in relation to the research questions posed in Chapter 1 will be discussed. This will be followed by a discussion of the other results which emerged from the analysis of the data.

6.1 Hypotheses

The first research question was aimed at investigating the extent of recreational reading (ERR) of Year 6 children. The study revealed that there was a wide variation in the amount of time children devoted to leisure reading. This is consistent with the findings of Greaney and Hegarty (1987) and Anderson, Wilson and Fielding (1988). The Year 6 West Australian children in the present study, with mean ERR = 26 minutes per day, read slightly less than the Year 5 Irish children in Greaney and Hegarty's (1987) study, (mean = 31.4 minutes per day), but considerably more than the Year 5 American children in the study of Anderson et al. (1988), (mean = 14.8 minutes per day). Nevertheless, it should be noted that the number of minutes spent in recreational reading each day is sporadic. A comparison of the means does not adequately reflect the variability in measures of ERR. This is apparent in the range of test-retest correlations between the three estimates of ERR collected on the
Leisure Activities Questionnaire in the present study (r=.77, r=.56 and r=.27).

The second question asked whether there is a relationship between ERR and reading achievement. A significant positive relationship was found between reading comprehension and ERR. This result supports the findings of Greaney (1980), Telfer and Kann (1984), Greaney and Hegarty (1987), and Anderson et al. (1988). Anderson et al. (1988) found that time spent reading books was the out-of-school activity that proved to have the strongest association with reading proficiency and was the best predictor of a child's growth as a reader from the second to the fifth grade. This study extends Anderson et al's finding, demonstrating that this relationship continues into Year 6.

This is an important relationship to recognise as an underlying principle in the development of good readers is that they take pleasure in the act of reading (Sloan and Latham, 1981). Through leisure time spent in reading for pleasure, this development can take place.

The fact that reading vocabulary did not correlate significantly with ERR or any of the other variables in this study would suggest that it be eliminated from future investigations in this area.
The third question asked whether there is a relationship between ERR and reading attitude. A significant positive relationship was found between ERR and both measures of reading attitude. The best predictor of ERR in the present study was attitude to recreational reading \( (r=.514) \). This is consistent with the findings of Greaney and Hegarty (1987). They reported that the largest correlation with time spent reading in their study was attitude to reading \( (r=.42) \). These results are not surprising. Without a positive attitude to recreational reading, it would be highly unlikely that a child would choose to spend time reading in preference to other possible leisure options. A positive attitude to reading develops when a child derives pleasure and satisfaction from previous reading experiences (Greaney, 1986). The more enjoyment the child experiences from leisure reading, the more the positive attitude is reinforced. It is then likely that the relationship between attitude and time spent in leisure reading is reciprocal.

A factor contributing towards the high correlation between ERR and attitude to recreational reading in the present study may have been that the instrument used (ERAS) was fine-tuned to discriminate between attitude to recreational reading and attitude to academic reading. The lower but still significant correlation between ERR
and attitude to academic reading \((r=.33, p<.001)\), illustrates this point.

The fourth question asked whether there is a relationship between ERR and the amount of television viewed. A significant negative relationship was found to exist, which means that the more time is spent in television viewing, the less time is spent in recreational reading. This is contrary to the findings of Greaney (1980), Telfer and Kann (1984), Searles, Mead and Ward (1985), Greaney and Hegarty (1987) and Anderson et al. (1988). However, Anderson et al. (1988) reported a "nearly" significant relationship. In commenting on this non-significant relationship, Greaney (1980) suggested that since much of leisure reading is carried out in bed, television may not have been available to the children at the time. He also commented that many children have learned to accommodate large amounts of television without sacrificing other activities.

In the present study, the amount of television viewed included video programmes whereas there is no reference to videos in any of the previous studies reviewed. Video recordings greatly increase the availability of programmes which are attractive to the children and allow for repeated viewings of favourite programmes. In order to accommodate the increased availability of attractive programmes, it is possible that some sacrifices of
alternative leisure activities would need to be made. The significant inverse relationship found between ERR and the amount of television viewed suggests that one of these activities is recreational reading. In this context, the value of reading as a worthwhile recreational activity needs to be emphasised along with possible limitations on the amount of time children spend viewing television and video programmes.

The fifth question asked whether there is a relationship between ERR and the availability of interesting reading materials in the home. No significant difference was found between those children who had sufficient access to interesting materials in the home (N=35) and those children who did not (N=80).

However, in the present study, a significant positive relationship was found between ERR and the number of books in the home. Providing suitable reading materials is positive support for independent reading. Greaney and Hegarty (1987) found that children who read for more than one hour were more likely to have had books bought for them by their parents during the previous year than children who read for less than an hour. In the present study, the home was the most common source of books. Outside the home, the school library was used by more children than a public library and friends were the least used source of books. Library membership is a well
established predictor of book reading (Greaney and Hegarty, 1987). In the present study, 47.8% of children used a public library. The findings suggest that the children who are motivated to read during leisure time use other sources, as well as the home, to satisfy their need for interesting reading materials. Thus, easy access to a plentiful supply of interesting reading materials needs to be maintained, both in and out of school, to ensure that suitable materials are on hand whenever the child feels like reading.

The sixth question asked whether there is a relationship between ERR and the extent of organised out-of-school activities. No significant difference was found in ERR between those children who did participate in organised out-of-school activities (N=30) and those who children who did not (N=85). This is consistent with the findings of Greaney (1980) and Anderson et al. (1988). Both of the above studies also revealed small but significant positive relationships between book reading and doing chores and doing homework. In the present study, these activities were considered to be not organised because they were unstructured or irregular. However, the chi square analysis revealed that the relationship between ERR and homework was on the border of being significant which suggests that children who do homework may be more likely to engage in recreational reading than children who do not do homework. In contrast, it is interesting to
note that Greaney's (1980) study revealed a significant negative relationship between the amount of time devoted to book reading and time spent being inactive or lying about. This suggests that "bookworms" tend to be active children.

The seventh question asked whether there is a difference in ERR between boys and girls. No significant difference was found. This is consistent with the findings of Anderson et al. (1988). However, it is contrary to the findings of Greaney (1980) and Greaney and Hegarty (1987) who found that girls read significantly more than boys.

In the present study, the girls (mean = 30 minutes) read more than the boys (mean = 23 minutes). This was also the case in the study by Anderson et al. (1988) but the difference was not significant in either study. In these two studies, there were fewer girls than boys in the samples and the number of subjects were 115 and 155 respectively. The t test makes adjustments for smaller samples and at a given alpha level, the smaller the sample, the larger the t-value must be in order to reach significance. In Greaney's (1980) study, the very large sample of 720 children contained approximately the same number of girls and boys and gender proved to be the strongest predictor of leisure reading.
However, in the light of current trends in education, the fact that there was no significant difference in ERR between boys and girls in the present study, may be a reflection of the policies of gender equity and equal opportunity being promoted in West Australian schools. Distinction between activities suitable or acceptable for boys or girls has faded. It is reasonable to expect that this perception would filter through to children's leisure activities.

6.2 Other Findings

6.2.1 Recreational Reading and Homework

The chi square analysis revealed that the relationship between ERR and homework was on the border of being significant. It was suggested that children who do homework may be more likely to engage in recreational reading than those children who do not do homework but this result would need to be confirmed or refuted by further research.

Anderson et al (1988) found small but significant positive associations between the out-of-school activities of book reading and doing homework. Their analyses also indicated that doing homework had a significant influence on growth in reading comprehension. The significant relationship between reading achievement and time spent in leisure reading has been discussed above and it could be that the existence of a beneficial
homework routine could strengthen this relationship. The habit of homework and the habit of leisure reading could easily share the same foundations.

6.2.2 Number of Books in the Home

There was a significant positive relationship between ERR and the number of books in the home. Greaney (1986) explained that it is almost impossible to develop an interest in reading if there is a lack of suitable reading materials, as is the case in many underdeveloped countries in the world. However, Australian children have an abundance of quality literature available in a very competitive book market which makes book ownership within reach of most families. Dupart (1985) also stresses the importance of book ownership in encouraging the habit of leisure reading. Greaney and Hegarty (1987) found that, compared to non-book readers, children who spent more than one hour of leisure in book reading were more likely to have had books bought for them by their parents in the previous year, were encouraged to read and had parents who read.

In general, the number of books in the home reflects the value placed on reading in the home and the presence of reading materials in the home is associated with reading achievement (Greaney 1986).
6.2.3 Source of Books

The most common source of books for the children in this study was the home. Most of the children read their own books (94.8%) and 43.5% read books belonging to their brothers or sisters or parents. More children used the school library (71.3%) than a public library (47.8%), and fewer children used the class library (28.7%). Friends were the least used source of books (20.9%). These findings indicate that children use other sources as well as the home to supply their leisure reading materials. This is reinforced by the finding that there was no significant difference in ERR between those children who have sufficient access to interesting materials in the home and those children who do not.

The predominance of the home and the school library as sources of reading materials is undoubtedly due in part to their convenience. Furthermore, children who seek out materials from further afield may be more highly motivated to read and may be outstripping the local supply or they may find the range of choices elsewhere more to their tastes.

Library membership is a well established predictor of leisure reading (Greaney and Hegarty 1987) and although nearly half of the children in the present study used a public library, the ERR of these children was not significantly different from the ERR of the children who
did not use a public library. Perhaps the home and the school are adequately fulfilling their obligations to provide interesting reading materials for the majority of these children at present.

The fact that friends were the least used source of books could indicate that the peer group, which tends to shun solitary activities, is not generally associated with leisure reading. This was illustrated by a comment from one of the subjects who was given ERAS individually because she was at a music lesson when the survey was administered to her class. Upon completing the survey, she said, "I hope none of my friends see this. They’ll think that all I ever do is have my head in a book." She was re-assured of the confidentiality of her responses. This perception could account for the low number of children using friends as a source of books.

6.2.4 Increasing Recreational Reading

It was interesting to find that 87% of children in the present study indicated that they would do more voluntary reading given one or more of the following conditions:
(a) more interesting books,
(b) more time to read, and/or
(c) a quiet place to read.

It appears, therefore, that the majority of children have a favourable disposition towards reading which could be exploited to increase the amount of time children devote
to leisure reading. This strongly suggests that support for leisure reading needs to be improved. An effective partnership between the home and the school is essential as both have an important contribution to make towards the development and encouragement of the habit of leisure reading (Greaney 1986, Greaney and Hegarty 1987, and Wilson and Moon 1991). It appears that the awareness of the parents and the teachers could be heightened regarding their role in supporting children's recreational reading.

Of the 13% of children who indicated that they would not like to do more voluntary reading, some commented that they already spend a lot of time doing recreational reading. In comparing the data on the two groups, the results showed that there was a significant difference in both measures of reading attitude between the children who would like to do more voluntary reading and those children who would not, but there was no significant difference in their level of comprehension. This indicates that a detailed analysis of the reading attitude surveys of those individuals is warranted so that areas of concern can be identified. Then a starting point can be found for both parents and teachers to improve the child's attitude to reading.
In this chapter, the major findings and the significance of the study will be stated. Implications arising from the findings will be discussed. Recommendations for further research will be made, followed by a concluding statement.

7.1 Major Findings

The problem which was investigated was the extent to which the variables of reading achievement, reading attitude, amount of television viewed, availability of interesting materials in the home, participation in organised out-of-school activities, and gender are related to the amount of time children devote to leisure reading. The results showed that there was a wide variation in the amount of time children spend in leisure reading and the best predictor of the extent of recreational reading (ERR) was attitude to recreational reading.

There were significant positive correlations between ERR and reading comprehension and both measures of reading attitude, and a significant negative correlation between ERR and the amount of television viewed.
Access to interesting reading materials in the home, participation in organised out-of-school activities and gender were not significantly related to ERR.

The study indicated that children with a favourable attitude to reading, along with limited television viewing and competent reading ability are more likely to spend more of their leisure time in recreational reading.

7.2 Significance of the Study
The study was significant in that it extended the understanding of the factors related to the amount of time children spend in leisure reading as previous research investigated television only, not video. It also provided a picture of factors related to the amount of time Western Australian children spend in leisure reading. Insights into the structures required to support children's recreational reading were also gained.

7.3 Implications of the Findings
The relationships identified in the study can be used to indicate to parents and teachers which influential variables they can monitor to benefit children's reading. It is acknowledged that these relationships may not be cause-effect relationships but they do suggest possible causes which could be tested through experimental research.
The multiple regression provided a model of recreational reading. It showed that attitude to recreational reading, amount of television viewed and level of reading comprehension were the significant factors which together accounted for the most variance in ERR.

The first two significant variables are factors which parents can improve in situ by providing easy access to interesting reading materials and opportunities to read for pleasure, and by limiting the amount of television their children view. The third significant variable is not as readily controlled and is more in the domain of the teacher and the school. However, a profitable partnership between school and home can improve the level of achievement in reading, along with an improvement in attitude to reading. At school, teachers need to be aware of the value of recreational reading so that they do not lose sight of its importance while concentrating on teaching the skills of reading.

7.5 Recommendations For Further Research

On the basis of the present study, it is suggested that further research could be undertaken to extend the understanding of the factors related to the amount of time children spend in leisure reading in the following areas.
7.5.1 Age
Children in the present study were in Year 6 and at this age they are beginning to exercise some independence in their leisure activities. Different age groups with varying degrees of independence may exhibit different characteristics in relation to their leisure reading.

7.5.2 Intervention
Various means of intervention to increase the amount of leisure reading and its effects may be worthy of investigation. This would include studying children's leisure reading over extended periods of time, perhaps using diaries, which was not feasible in the present study.

7.5.3 Parents' Perception of Their Role
A study to ascertain what parents perceive their role to be in the development and maintenance of their children's leisure reading habits may be valuable. It may clarify and promote how they can effectively support their children's independent reading.

7.5.4 Children's Motivations For Leisure Reading
Qualitative methods of research may elucidate the reasons underlying the sporadic nature of children's recreational reading. Personal factors including the emotional
response to reading and the solitary aspect of reading may best be investigated using this approach.

7.6 Concluding Statement

The support of interested, knowledgeable adults is crucial to the development and maintenance of children's recreational reading habits. Apart from the valuable educational outcomes, increased leisure reading may lead more children to the discovery of the inherent pleasures of reading quality literature.
REFERENCES


APPENDIX 1

Leisure Activities Questionnaire
LEISURE ACTIVITIES QUESTIONNAIRE

NAME: _______ DATE OF BIRTH / /

1. What did you do after school yesterday?

Stayed Home [ ] Sports Training [ ] Homework [ ]
Shopping [ ] Club [ ] Computer [ ]
Visiting [ ] Lessons [ ] Hobby [ ]
A/School Care [ ] Music/Rad/Tape [ ] Other [ ]

2. Did you watch T.V. or Video yesterday? YES [ ]
NO [ ]

When? 3:30-4:00 [ ] 5:30-6:00 [ ] 7:30-8:00 [ ]
4:00-4:30 [ ] 6:00-6:30 [ ] 8:00-8:30 [ ]
4:30-5:00 [ ] 6:30-7:00 [ ] 8:30-9:00 [ ]
5:00-5:30 [ ] 7:00-7:30 [ ] 9:00-9:30 [ ]

3. Did you do any voluntary reading yesterday? YES[ ] NO[ ]

4. How long did you spend reading? 0 minutes [ ]
1-15 minutes [ ]
16-30 minutes [ ]
31-45 minutes [ ]
46-60 minutes [ ]
61+ minutes [ ]

5. How many books do you have at home that you like to read?
0 [ ], 1-5 [ ], 6-10 [ ], 11-15 [ ], 16-20 [ ], 21+[ ]

6. Where do you get your books from?

My own books [ ] Class Book Corner [ ]
My brother's or sister's books[ ] School Library [ ]
My friend's books [ ] Public Library [ ]

7. What would make you want to do more voluntary reading?

More interesting books [ ] More time to read [ ]
A quiet place to read [ ] Nothing [ ]
APPENDIX 2

Elementary Reading Attitude Survey
ELEMENTARY READING ATTITUDE SURVEY

School ________ Grade __ Name ________________

1. How do you feel when you read a book on a rainy Saturday?

2. How do you feel when you read a book in school during free time?

3. How do you feel about reading for fun at home?

4. How do you feel about getting a book for a present?
5. How do you feel about spending free time reading?

6. How do you feel about starting a new book?

7. How do you feel about reading during summer vacation?

8. How do you feel about reading instead of p'aying?
9. How do you feel about going to a bookstore?

10. How do you feel about reading different kinds of books?

11. How do you feel when the teacher asks you questions about what you read?

12. How do you feel about doing reading workbook pages and worksheets?
13. How do you feel about reading in school?

14. How do you feel about reading your school books?

15. How do you feel about learning from a book?

16. How do you feel when it's time for reading class?
17. How do you feel about the stories you read in reading class?

18. How do you feel when you read out loud in class?

19. How do you feel about using a dictionary?

20. How do you feel about taking a reading test?
Elementary Reading Attitude Survey
Scoring sheet

Student name ____________________________________________
Teacher ________________________________________________
Grade __________________ Administration date __________________

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<th>Points</th>
<th>Expression</th>
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<tr>
<td>3</td>
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<tr>
<td>2</td>
<td>Mildly upset Garfield</td>
</tr>
<tr>
<td>1</td>
<td>Very upset Garfield</td>
</tr>
</tbody>
</table>

Recreational reading

1. ___
2. ___
3. ___
4. ___
5. ___
6. ___
7. ___
8. ___
9. ___
10. ___

Raw score: ___

Academic reading

11. ___
12. ___
13. ___
14. ___
15. ___
16. ___
17. ___
18. ___
19. ___
20. ___

Raw score: ___

Full scale raw score (Recreational + Academic): __________

Percentile ranks

Recreational

Academic

Full scale