



If you have discovered material in AURA which is unlawful e.g. breaches copyright, (either yours or that of a third party) or any other law, including but not limited to those relating to patent, trademark, confidentiality, data protection, obscenity, defamation, libel, then please read our [Takedown Policy](#) and [contact the service](#) immediately

THE INFLUENCE OF THE SOCIO-EDUCATIONAL READING ENVIRONMENT IN AN
ARAB UNIVERSITY UPON ENGLISH READING PERFORMANCE

MOHAMED AHMED ASHIURAKIS

Doctor of Philosophy

THE UNIVERSITY OF ASTON IN BIRMINGHAM

December 1987

This copy of the thesis has been supplied on condition that anyone who consults it is understood to recognise that its copyright rests with its author and that no quotation from the thesis and no information derived from it may be published without the author's prior, written consent.

The Influence of the Socio-Educational Reading Environment in
an Arab University upon English Reading Performance

Mohamed Ahmed Ashiurakis

PhD
1987

A Thesis Summary

Research into FL/EFL macro-reading (the effect of the broader context of reading) has been little explored in spite of its importance in the FL/EFL reading programmes. This Study was designed to build on previous work by explaining in more depth the influence of the socio-educational reading environment in an Arab university (Al-Fateh University in Tripoli, Libya) - as reported by students, upon these students' reading ability in English and Arabic (particularly the former). Certain aspects of the lecturers' reading habits and attitudes and classroom operation were also investigated.

Written cloze tests in English and Arabic and self-administered questionnaires were given to 125 preliminary-year undergraduates in three faculties of Al-Fateh University on the basis of their use of English as a medium of instruction (one representing the Arts' stream and two representing the Science stream). Twenty two lecturers were interviewed and observed by an inventory technique along with twenty other preliminary-year students. Factor analysis and standard multiple regression technique were among the statistical methods used to analyse the main data. The findings demonstrate a significant relationship between reading ability in English and the reading individual and environmental variables - as defined in the study. A combination of common and different series of such predictors were found accountable for the variation (43% for the first year English specialist; 48% for the combined Medicine student sub-sample) in the English reading tests. Also found was a significant, though not very large, relationship between reading ability in Arabic and the reading environment. Non-statistical but objective analyses, based on the present data, also revealed an overall association between English reading performance and an important number of reading environmental variables - where many 'poor' users of the reading environment (particularly the academic one) obtained low scores in the English cloze tests. Accepting the limitations of a single study, it is nevertheless clear that the reading environment at the University is in need of improvement and that students' use of it also requires better guidance and training in how to use it effectively. Suggestions are made for appropriate educational changes.

KEY TERMS:

EFL ARABIC READING ENVIRONMENT READING HABITS HIGHER EDUCATION

DEDICATION

To my father for my early and continuous love of reading
and to my wife, Nazira, and daughters, Reem and Taghreed for their
patience, encouragement and affection

ACKNOWLEDGEMENTS

I would like to thank those who were involved in the supervision of this research: Professor John Swales, Mr. Thomas Bloor, and Dr. Peter Coxhead. Their scholarly comments and professional guidance at various stages of the study have been most stimulating, encouraging and invaluable.

I am also grateful to those educators and students in Libya and England for their cooperation and patience when I did the research fieldwork in their classrooms and during their precious time. Most notably, I would like to thank the staff and students in the Departments of English, and Educational and Psychological Studies (Education Faculty) and Faculties of Sciences, Medicine and Veterinary Medicine at Al-Fateh University - Libya; and their counterparts in the Biology Department as well as the acting principal at Solihull Sixth Form College, England.

Furthermore, my feelings of gratitude are due to those authors and publishers who allowed me to use extracts of their works in the research project: Dr. Dan Douglas from Iowa State University, U.S.A. for his Arabic cloze test and Schools Council Publications & Heinemann Educational Books for the Reading Behaviour Inventory Protocol cited in K. Lunzer and K. Gardner (eds.), 1979, The Effective Use of Reading.

Reading Ability, Reading Habits,
Attitudes and Self-Reading

TABLE OF CONTENTS

	<u>Page</u>
A THESIS SUMMARY	2
DEDICATION	3
ACKNOWLEDGEMENTS	4
TABLE OF CONTENTS	5
LIST OF TABLES	9
LIST OF FIGURES	11
PREFACE	12
CHAPTER ONE	AN INTRODUCTION TO THE STUDY
1.1	Background and Significance of the Study. 16
1.2	The Purpose and Scope of the Study 19
CHAPTER TWO	A REVIEW OF LITERATURE
2.2	The Conceptualization of Reading as a Social Process 26
2.3	Research on Academic Environment and Student Learning 38
2.4	Studies on Reading Habits and Attitudes 44
2.5	Studies on Contextual Correlates of

	EFL/ESL Reading Ability	53
2.6	Environmental Factors and EFL Reading in Arab Universities	61
2.7	Summary of the Review of Literature	67
CHAPTER THREE	LIBYA: AN EDUCATIONAL AND LITERACY PROFILE	
3.2	Education	69
3.2.1	Historical Development	69
3.2.2	The Road to University	74
3.2.3	The University of Al-Fateh	77
3.3	General Literacy	88
3.3.1	Adults and Illiteracy	89
3.3.2	Opportunities for Reading	90
3.3.3	Leisure Behaviour	94
3.3.4	Popular Reading	96
CHAPTER FOUR	METHODOLOGY	
4.2	Section One: The Questionnaire Schedule	106
4.2.1	The Definition of Reading Environment	106
4.2.2	The Measurement of Reading Environment	108
4.3	Section Two: The Reading Tests	126
4.3.1	Rationale of Cloze Procedure	128
4.3.2	Cloze Methodology Used in the Study's Tests	136
4.3.3	Cloze Procedure as a Measure of Reading Comprehension	147

4.4	Section Three: The Staff Interviews	155
4.5	Section Four: The Reading Behaviour Inventory	163
4.6	Section Five: Fieldwork in Libya	167
4.6.3	Selection of the Sample	172
4.6.4	Administration of Instruments	175
CHAPTER FIVE	RESULTS OF THE READING TESTS	
5.1	Results of English Tests	187
5.2	Results of Arabic Tests	194
CHAPTER SIX	ANALYSIS OF STUDENT QUESTIONNAIRE DATA AND THEIR RELATIONSHIP WITH CLOZE RESULTS	
6.1.1	Item Selection	199
6.1.2	Data Re-coding	202
6.1.3	Results of the Students' Questionnaire	204
6.2.1	Scale Construction	213
6.3.1	The Relationship Between Reading Environment and Reading Performance	218
CHAPTER SEVEN	RESULTS OF RBI AND STAFF INTERVIEWS	
7.1	Results of RBI (Classroom Observations)	228
7.2	Results of Interviews with Lecturers	234

CHAPTER EIGHT DISCUSSION OF RESULTS

8.1.1	'English' Regression Findings	257
8.1.1.1	Interpretation of Similar Findings	258
8.1.1.2	Interpretation of Different Findings	261
8.2	General Impressions	278
8.2.1	English Reading Test Conclusions	279
8.2.2	The Student Questionnaire Conclusions	280
8.2.3	The Staff Interview Conclusions	282
8.2.4	Classroom Observation Conclusions	286
8.3	'Arabic' Regression Findings	288

CHAPTER NINE SUMMARY OF THE FINDINGS AND RECOMMENDATIONS

9.2	Summary of Findings	295
9.3	Pedagogical Implications	298
9.4	Implications for Future Research	308

APPENDICES	310
------------	-----

LIST OF REFERENCES	348
--------------------	-----

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Programmes Taught at the General Secondary Level in All Public Schools in Libya.....	76
2. Amount of Instruction in Arabic and English for Each Year in the Secondary School Level.....	77
3. Number of School Girls at Compulsory Educational Level Between 1969 - 70 and 1983 - 84 School Years.....	90
4. Major Newspapers in Libya during February 1985.....	92
5. Fourth-Year English Cloze Tests.....	188
6. English Criterion Group Results.....	189
7. First-Year English Cloze Tests.....	190
8. Arabic Cloze Test Results.....	196
9. Comparison between Sudanese and Libyan Arabic Cloze Results.....	197
10. Correlations of English Cloze with Arabic Cloze for First-Year English Specialists.....	198
11. Correlations of English Cloze with Arabic Cloze for Combined Medicine Sub-sample.....	198
12. The Relative Frequency (in Percentages) of the Eight Factual Variables Deleted, for Each Sub-Sample of the Study.....	201
13. The Contrast between the Users of Monolingual Dictionary and Those of Bilingual Dictionary.....	211
14. Factor Matrix for the Reading Environmental Variables (Using Principal Component Analysis).....	214

15. Oblique Analysis of Reading Enviromental Variables..	216
16. Reliability Coefficients for the Five Dimensions....	218
17a. Results of Regression Analysis for the Whole Sample: Background, and Reading Enviromental Variables with Arabic Reading Performance.....	221
17b. The Most Effective Independent Variables in the Regression Analysis of the Whole Sample.....	222
18a. Results of Regression Analysis for First-Year English Specialists.....	223
18b. The Most Effective Independent Variables in the Regression Analysis for the First-Year English Specialists.....	224
19a. Results of Regression Analysis for the Combined Medicine Sub-sample.....	225
19b. The Most Effective Independent Variables in the Regression Analysis for the Combined Medicine Sub- sample.....	226
20. Total Percentage of Lecturer's Time Spent on Various Activities.....	230
21. The Percentage of Student's Time Spent on Various Activities.....	232
22. Pattern of Continuity in Reading for Each Group of Subject Areas in Each Major Discipline Given as Percentages of the Total Reading Observed in the Group.....	233
23. The Number of the English Department Instructors Reading in Arabic and English.....	239
24. Rank Order of Book Sources as Reported by Lecturers.	241

25. Time Devoted to the Four Language Skills.....	244
26. A Comparison between Staff Groups on Use of Various Reading Types in Classroom.....	246
27. A Comparison between Lecturers' Responses and Those of Students on the Use of Reading for Homework in Both Faculties Involved in the Study.....	248
28. Sources of Text Read as Part of Homework.....	249
29. A Comparison between Staff and Students on the Use of Textual Sources as Part of Homework.....	251
30. Sources of Text Read in Preparation for Exam.....	253

LIST OF FIGURES

Figure

1. The Conceptual Model Adapted for the Study.....	103
2. The Student Numbers Participating in the Three Major Instruments of the Study.....	105
3. Frequency Polygon of English Cloze Results (1st Year English Specialists).....	191
4. Frequency Polygon of English Cloze Results (Premeds & Prevets).....	192
5. Frequency Polygon of Arabic Cloze Results (Total Sample).....	195

Improving the reading situation at

PREFACE

My interest in the topic of this research, the influence of the reading environment in the Libyan University of Al-Fateh upon the English reading performance of the University's preliminary-year undergraduates, began when I was teaching English as a foreign language (EFL) to several groups of the University's students including English-medium undergraduates from the Faculties of Education (English Department) and Veterinary-Medicine in 1980. This close encounter made me aware of the fact that the English-medium students' performance, particularly the reading performance of those in their beginning years, was not satisfactory considering the amount of English reading material they had to read for learning and credit in their major fields of study. Although some instructional attempts to remedy the above situation had been made (e.g., splitting the course's short time schedule between independent study mini-projects on language and classroom activities on reading improvement), they seemed as if they were treating the symptoms but not necessarily the real causes of the problems.

Towards the end of 1982, I left for Britain to acquire further training in my specialism, and this opportunity enabled me to undertake this research project which is meant to be a small contribution to investigate such causes or more appropriately the possible influences associated particularly with the students' reading ability in EFL -- a contribution that may constitute an

initial systematic step towards improving the reading situation at the University.

But is reading in EFL essential? It is certainly of paramount importance, especially in the English Department and most of the 'technical' faculties of the University of Al-Fateh where the content areas are taught in English. The skill is also a pre-requisite along with other EFL skills for many Libyan students who seek further studies in their specialized fields abroad. Of course, the need for fluent reading in English does not end with the termination of academic study: adult Libyans of various professions, particularly in science and technology, with adequate command of the language searching for development in their chosen sphere of work will have to read the appropriate literature in English.

One of the reasons for this is the fact that 'English is now established as the principal international language of science...nearly two-thirds of engineering literature appears in English' (Mackay and Mountford, 1978, p.6). Translation into Arabic of English and other FL publications in science and technology seems still to be unable to cope with the ever-increasing number of FL books and periodicals issued every year. (But see section 3.3.4 for further discussion on this problem) According to Al-Rufai (1969, p.89), referring to the same point, '...translators cannot possibly translate in a life time the amount of material now published in the U.S.A and Britain in a single day'. Al-Shami (1983, p.293) similarly argues that because of difficulties such as 'lack of current scientific materials in Arabic, lack of an efficient translation center and the absence of

an adequate bibliographic control of Arabic materials' the Arab world (including Saudi Arabia on which his study is focused) will have to continue teaching the sciences in a second international language, namely English, with the objective that 'acquisition of knowledge' is the important priority. Proficiency in English 'does not preclude the use of Arabic as a medium of instruction' nor has it 'compromised [the] national identity' of countries such as India, Pakistan and the Sudan whose universities teach in English (ibid.).

Despite such apparent need for reading in English in Al-Fateh University, programmes of Libyan secondary schools and faculties have not been conducted in conformity with such need and expectation. They seem to follow what Ronald Morris (1973, p.98) has identified as one of two main assumptions or means to achieve mature reading, : '...that the problem of helping pupils to read at a more mature level is in the very nature of things a problem for teachers of older pupils'. Thus they do not follow the assumption '...that growing into reading is a continuous process and that, accordingly, the teaching of reading in the earlier stages can profitably be arranged in ways that will make the greatest possible contribution to the future emergence of the mature reader'.

A number of researchers have commented on inadequate practices of reading in some Libyan learning and teaching situations. Pointing to some examples of pages taken from an English reader, prescribed for and used by Libyan secondary schoolchildren, El-Mehdiwi (1975, p.39) has reported that the pupils scribbled Arabic translations of many English words on the

pages. His conclusion on that was that this was a learning style which the pupils had adopted '...so that they could more quickly memorize both the English word and its pronunciation'. Swales (1978, p.46) who reviewed briefly the EFL teaching and learning situation in the Science and Engineering Faculties in Tripoli in 1970, has observed that the Faculty of Engineering required a '...relatively restricted reading programme of its students', a situation which he characterizes as 'unusual'. In his paper on Benghazi University (now Garyounis University), Lilley (1976, p.8) has noticed that '...students specializing [in English] in the English Department of the Faculty of Arts were not fluent readers of authentic materials in English after two years of specialization'.

However, this speculative and anecdotal evidence (including my initial observation cited above) needed to be at best rigorously verified and updated. This study also, and more importantly, attempts to clarify some major problems and assesses students' performance in reading in EFL at the university preliminary-year level, and finds out the 'possible influences' which according to the thesis of the present researcher were expected to be closely connected with the broader context of reading of the Libyan student in the English Department and other English-medium faculties.

CHAPTER ONE

AN INTRODUCTION TO THE STUDY

1.1 Background and Significance of the Study

The influence of the wider environment on FL reading performance, in particular EFL reading comprehension, has not, as far as we know, been dealt with directly. A review of literature (see Chapter Two) has indicated that most studies on FL or EFL reading have been either descriptions of extensive voluntary reading or explorations of associations between a single or few external or individual factors and reading performance. However, the studies have looked at L2/bilingual pre-university level situations and have not been concerned with Arabic speakers. Methodologically, very few of such studies have used more than one instrument to gather data on the research problem (the triangulation approach used in this thesis for cross-checking — see e.g., pp.248, 250) or have employed a sophisticated statistical technique (e.g., multiple regression procedure) to analyse the data thoroughly in the same project. The other concerns of studies on FL or EFL reading have been within the 'micro-reading' area where the focus of research has been on the text-reader interactions without consideration of the social context of reading. Examples of these concerns include the effects of vocabulary, grammar, reading skills, or patterns of writing on FL/EFL reading comprehension.

Perhaps the Dan Douglas research (1977) on the study habits of the Sudanese students in the University of Khartoum has been so far the only project investigating such a broad context of academic study, albeit not exclusively on reading, in a higher educational institution in a developing country. This research therefore, served as an earlier major impetus to the present study in that it revealed how influential are the students' personal and educational backgrounds on their study performance. Douglas found that the study difficulties of Sudanese students were not necessarily due to linguistic factors nor to lack of study skills alone, but rather to the effect of inside and outside EFL classroom variables:

The social orientation of the females, together with appropriate lower motivation, would suggest that simply providing them with appropriate study skills and techniques wouldn't necessarily improve their university performance. (p.93)

Also, Douglas brings forward these important 'cause-effect' relationships: he states that low motivation was caused by impersonalized teaching and dull university life; rote-memorization was induced by deficiencies in English proficiency and the pressure of examinations, and that problems in reading were due to deficiencies in English and in content area background, or to little reading in the students' university career. It should be noted that such relationships were not revealed by regression analysis; rather they were inferences based on the separate results of Douglas's different instruments. His attempt to arrive at similar but significant conclusions statistically did not succeed because the student life and attitude factors involved in the relationships were mostly used in

a regression model as three global scales rather than several and more meaningful and clear-cut variables (see *ibid.*, p.87). Douglas, therefore, called for further research using such factors as variables in a regression in order to better understand their nature and importance.

This was generally adhered to by the present investigation, though the latter's actual variables were not necessarily the same as those of Douglas owing to the difference in focus and use of methodology between the two studies. Douglas's project is concerned with the study habits of the Sudanese students who belong to diverse cultural backgrounds and to the English-medium Khartoum University. By contrast, the present study is directly interested in the effect of the reading environment of the Libyan students whose culture is relatively homogeneous and who belong to the dual Arabic English-medium Al-Fateh University. Douglas's data are based on official (school and university) and experimental exam and test results as well as student self-reported information, while our data are drawn from this research's test results, student and lecturer self-reports and classroom observation results. Thus, such differences as well as the fact that Douglas's data are only representative of his study's environment during 1977, make this present research significant. This significance will be in terms of its projected attention to a rather different context and to a more exclusive concern with the reading dimension based on the needs of the Libyan academic setting in a present perspective.

The present study will also prove valuable to researchers and practitioners concerned with the use of reading or literacy in

developing nations by presenting a systematic account of the reading habits of preliminary-year undergraduates and their lecturing staff in an Arab university.

1.2 The Purpose and Scope of the Study

1.2.1 The Hypothesis

Reading performance in English as a foreign language may be more crucially affected than is commonly realized by the broader context (the social and educational reading environment) of the EFL reader (Libyan preliminary-year university students taken as an example). This, if supported by the evidence, would mean that if one improves the reading environment such as the one mentioned above, performance in EFL will improve too.

The sets of questions to be answered in order to establish the validity of the foregoing hypothesis were:

1. What is the quality of the socio-educational reading context and how is this context used?
 - a) What leisure reading habits have the students developed?
 - b) What are the student's attitudes towards reading?
 - c) What reading for academic purposes have they been engaged in?
 - d) What are the facilities available and accessible for reading?
 - e) What are the leisure reading habits of the lecturing staff of this study's undergraduates?
 - f) How do the staff use reading in the classroom and for homework?
 - g) What percentage of reading time is given to reading across the curriculum?
 - h) Is the reading activity continuous or fragmentary in the classroom?
2. What is the quality of the students' reading performance in English and Arabic?
 - a) How well do students comprehend required English reading texts?
 - b) How well do students comprehend a general Arabic reading text?
3. Is there any relationship between the quality and use of the broader reading context — reported by students, and

the level of the students' reading performance in English and Arabic — particularly the former?

In this thesis, the socio-educational reading environment refers to the home, university, print and other leisure factors involved in the student's reading for pleasure or learning, also to student's approaches and/or tendencies towards such factors; reading performance (or reading ability) refers to the student's reading comprehension test score.

Specifically, it was hypothesized that the socio-educational reading environment of the preliminary-year students of Education (English Department), Veterinary-Medicine and Medicine Faculties in Al-Fateh University in Tripoli-Libya as measured by a self-administered questionnaire would affect the above students' English and Arabic reading comprehension scores — particularly the former, as measured by basic cloze tests.

In addition to studying the effect of the student self-reported reading environment, this investigation explored two other broad contextual factors (thought to be related to the students' reading performance): the students' lecturing staff and classroom reading behaviours. These factors were measured by a structured interview schedule and an observation method respectively.

1.2.2 Summary of the Study's Contents

To summarize the contents of the present study, the following brief account is given: Chapter Two indicates the scarcity of research on the main topic of the present investigation, gives a theoretical and empirical justification to

the study's hypothesis, and cites relevant methodology. In so doing, it discusses the effects of various different disciplines; presents a survey of empirical research about the effect of academic environment (mainly in western developed nations) on student learning, the scope of extensive reading in L2 and FL and the possible association between certain selected individual or external factors and L2 or FL reading ability in non-Arab contexts. Also presented is a review of some important speculative suggestions pointing implicitly and explicitly to the nature and possible influence of the wider educational, cultural and linguistic contexts in the Arab world upon reading of Arab students.

Chapter Three deals with education and general literacy in Libya (being an example of an Arab and developing country focused upon in this research) with special reference to the schooling background of the study's subjects before joining the university and to the structure and functioning of Al-Fateh University and its three faculties involved in the study and to the availability of popular reading resources. Such a description provides a literacy environment -- a broader context at the societal level against which the research results can be interpreted.

Chapter Four is about the design, methods and procedures which the study had used including the operational definition and measurement of the reading environment under study, choice of the samples and administration of the research's five data-collecting instruments. This Chapter reports further studies on extensive reading and some major contextual predictors of reading performance in order to provide more justification for the

inclusion of such predictors as questionnaire or interview items in the present work. It also gives a detailed review on cloze procedure indicating: its theoretical assumptions, its appropriateness as a measure of L1 or L2 reading comprehension and the relative practicality and procedures of the clozentropy method adopted by this study.

Chapter Five starts the presentation of the research results. It includes only the analysis and minimal discussion of cloze test data.

Chapter Six focuses on the analysis of the students' questionnaire data including looking for general patterns in the data, the procedures used to group the data into reliable and meaningful common dimensions of the student self-reported reading environment under study, and the testing of the study's main hypothesis.

Chapter Seven has the results of both the classroom observation method (Reading Behaviour Inventory) and interviews with lecturers.

Chapter Eight contains the full discussion of the study's results. Firstly, it deals with the interrelation between the English cloze and questionnaire results (the association explored by the study's main hypothesis). Secondly, it provides an alternative but objective interpretation of the findings which are yielded by the various instruments of the present investigation. Finally, the Chapter touches briefly on the relationship between the Arabic cloze and questionnaire data.

Chapter Nine sums up the findings of the study and offers recommendations for pedagogy and future research.

CHAPTER TWO

A REVIEW OF LITERATURE

2.1 Introduction

During the past decade, an increasing output of research has examined the relationships between various social, cultural and psychological factors and the level of achievement in first language reading (particularly English as a first language). Summaries and reviews of research done in the field of reading since 1971 in the United States of America, and recently (1976-1984) in Britain are available in the journal of Reading Research Quarterly, (see Weintraub et al., vols. 8-14), in Merritt's (1976) New Horizons in Reading, and in the journal of Reading (see Goodacre, vols. 14, 17, and 20) respectively. Although the number of studies on L1 (mainly English) reading reported in the first journal (RRQ) has amounted to over 5,800 since 1965 (see Weintraub et al., 1978-79, p.287), the number of titles dealing with the relationships between socio-cultural or academic factors and reading performance in English as a first language cited in the same journal only totalled approximately 300 studies. Much of the latter research and its British counterpart reviewed by Goodacre have focused on the following variables influencing reading achievement, development or interests in the primary school in the U.S.A and Britain: economic, cultural and/or academic deprivation, sex, minority or ethnic group differences and home environment. The research has also used American or British standardized tests

to assess mostly the schoolchildren's reading, intelligence, maturity, and language; and used questionnaires, interviews (a few of which were made with parents by telephone), student records and teacher ratings to collect data on the contextual factors.

Also steadily increasing in number have been studies involving the teaching of advanced reading in foreign languages including English as a foreign language (Brumfit, 1977,p.74). According to Ulijn (1980, p.17), the dominant concerns in such studies have been 'the refined analysis of FL reading needs and the construction of reading exercises rather than design of models or theories to account for the reading process'. But, Ulijn goes on to observe that research into reading in a second language has profited from L1 reading models and theories, especially as these have shifted from a mechanical emphasis to the adoption of the linguistic factors in a psycholinguistic approach.

However, the more pertinent studies for the present investigation are not those which are concerned with correlational studies relating schoolchildren's reading achievement and some other socio-cultural variables commonly found in Western developed countries; nor are they concerned with the cognitive processes involved in the act of reading itself but with those contextual parameters bearing on FL/EFL reading.

Investigations which deal with the reading environment and especially its influence on the students' FL/EFL university reading proficiency seem to be uncommon in the literature. Even those "sociological and anthropological considerations" directly related to reading in a FL context 'have...been little explored' (Brumfit, *ibid.*). Such attempts have been concerned primarily with

describing the scope of the learners' extensive reading (the reading habits and interests and reading outside the syllabus) or correlating a few external/individual factors with reading performance in predominantly L2/bilingual primary/secondary school level than contexts in FL tertiary level situations (see examples of such studies below).

However, due to the apparent scarcity of literature on the issues central to the present study, and to the need for indicating why such issues are significant, how they are measured, and the relationship between the two key concepts (the reading environment and reading performance), the investigator decided to profit firstly from both available and relevant L1 reading theories and L2/FL research findings, and secondly to divide the presentation of such previous and related literature into two parts: one for broader relevant issues such as the conceptualization of reading as a social process affecting reading performance and research studies concerning the effect of academic environment on student learning, L2 reading habits, contextual correlates to L2/FL reading ability, and environmental factors associated with EFL reading in Arab universities; and two for specific issues such as the use of dictionary, of memorization and of cloze and clozentropy procedures to assess reading comprehension. The issues of the first part of the review will be the subject of this chapter while those of the second part will be, among other things, the concern of the next chapter on methodology.

2.2 The Conceptualization of Reading as a Social Process

Generally accepted has been the view of reading as a cognitive-linguistic process. But the conceptualization of reading as a social process has 'only recently gained acceptance' (see Bloome and Green, 1982, p.309). Perhaps the review of research on the latter aspect of reading compiled by Bloome and Green (ibid.) is one of the most comprehensive summaries to date; unlike, for example, Cazden's review (1981) which focuses on a single context of reading: classroom interactions and primary school children's learning to read. Therefore, we will consider in some detail below the former work as well as those related studies which we were able to obtain and summarize. The above authors have brought together a variety of ideas and evidence on the social and contextual influences on reading processes from fairly recent research (75 studies in all) in a number of disciplines.

The salient and general conclusion of this research indicates that reading as a cognitive-linguistic process is embedded in and influenced by social processes [or by multiple social contexts], (Bloome and Green, 1982, p.334). Six levels of social context of reading have been identified: (1) language/instructional setting; (2) classroom setting; (3) institutional setting; (4) community setting; (5) societal setting; and (6) cultural setting. The research work on the first two contexts focuses on students as individuals and on their individual reading performance, while that on the broader levels of context focuses on 'students as members of social and/or

instructional groups and on group behaviors [group reading performance]'. .

Before explaining the relationship between each level of context and reading, Bloome and Green report that locating social actions counting as reading events or contexts is complex and problematic. To illustrate its complexity, Heap (1980, p.272) suggests that not all student-text interactions are necessarily indicative of 'reading' and that 'it is sometimes possible to produce the correct answer by "reading the teacher" rather than reading the text'. In order to avoid any misleading conclusions about the results of reading instruction or development that might occur due to such a complexity, Griffin (1977), proposes that these conclusions should be based not only on reading events happening during official reading time but also on reading events outside that time and 'within the range of school events' (p.377). In these unofficial reading events, reading is treated and used as a tool to get information from materials that 'need to be read', e.g., menus, recipes, daily schedules, etc., (p.382).

Drawing conclusions about reading instruction or development based on advice from the teacher, on a standard schedule or the assumptions of standardized reading tests is said to be perhaps the reason for making the identification of reading events a difficult task (ibid., p. 377; Heap, 1980, p.267). According to such assumptions a correct answer is, for example, when the student has used his only resource, i.e., the target skill, employed the same or 'preferred frame of reference (sense, personal experience or written text) as that of the teacher or assessor, and done the task required, i.e., he has read the given

text (Heap, 1980, pp. 275, 280, 283). Like Griffen, Heap refers to other reasons or resources (mainly sociological) that might also explain whether the outcome or performance of a reading task is an interpretation of text or not: these include, for instance, the organization of the task (e.g., miscues may occur from anxiety about oral performing for a group, p.282), or external/internal resources provided by the task (e.g., correct answers may be based on a classroom discussion or a movie prior to the test/task, p.277).

2.2.1 Language/Instructional Setting and Reading

This context encompasses the way in which a reading task is organized (e.g., accepting a discussion during the telling phase of the story or after the story is presented - see Bloome and Green, 1982, p.316)), the way language is used in task structure (i.e., the students' consistent use of response registers during text recall lessons: such as 'imitative', new, or 'old-information-replacement responses' to the teacher's questions -- see Mosental and Na, 1980), and factors involved in the interpretation of the task (it is said that every language setting has cues embedded in its three domains: the nature of the activity, the information exchanged, and the social nature of the group -- see Bloome and Green, 1982, p.317). Research into such aspects of language/instructional context of reading has found them to be related to text interpretation and recall. For example, it was suggested that the task organization involving having questions about the story within the presentation of the story led

to more recall of the story than that which relegated discussion to the end and permitted no interruptions at all (ibid.).

2.2.2 Classroom Context and Reading

This context contains the broader aspects of the previous setting which are classified into three sub-contexts and found to be complementary to each other and as contributory influences of reading events or reading performance. As put by Bloome and Green (ibid.), these sub-contexts are: (1) 'structural contexts', (2) 'thematic context', and (3) 'intrapersonal context'. The first type of contexts involves task organizations (e.g., a multitask or recitation activity), classroom task demands, and social relationships, i.e., teacher-student interactions, student-text interactions, and peer-to-peer interactions - see Bossert, 1979). The second type of context refers to the teacher's theoretical approach to reading, e.g., meaning or holistic approach - see DeFord, 1979). The third classroom sub-context includes the student's personal learning style or "frame of reference" -- see Amarel, 1980 cited in Bloome and Green 1982. As an example of the impact of the classroom context, Bossert (1979, p.71-72) reports that in a task structure like recitation (in first grade) involving the entire class or a large portion of it, performance was made public (visible), and comparable. Thus, according to the author, 'pupil's self-esteem was challenged and his ability to demonstrate performance could be dependent in part on other's answers and in part on the teacher's questions'.

2.2.3 Institutional Context and Reading

According to McDermott (1977, 1979) the institutional context of reading is the system surrounding the classroom, e.g., the school context, which has constraints including values, policies, and practices. Such constraints were found to have produced the instructional practices which in turn influenced the reading processes in classroom. In a system (a school) in which, for example, competition results in different labels such as 'top' and 'bottom' reading groups, McDermott and Gospondinoff (1979) found that different instructional treatments were allocated for each type of the above group structure which would likely result in different group reading performances. For example, in the allocation of reading turns, it was reported that the top group would have a task organization by which they could predict what and when they would read without the presence of the teacher while the bottom group would have another arrangement by which they could not predict the turns and read except with the help and attention of the teacher. Unlike the case with the former group, the latter's time and performance were found negatively affected (ibid., p.190).

2.2.4 Community Context and Reading

Larger than the institutional context is the community context in which the former exists. It was found (Popkewitz, 1981, cited by Bloome and Green) that the 'values, expectancies, and aspirations' of such a context for its children were reflected in the instructional and curricular decisions made by the staff, parents and students at the institutional level and that the

latter decisions '[affected] the nature and content of reading activities' in the classroom. But the findings of Reder and Green (1980) , quoted by the authors, suggest also a direct association between the social factors at the community level and 'how people view literacy [and] how they respond to text'. For example, Reder and Green found that an Alaskan community viewed the use of literacy in business transactions, e.g., in the marketplace, with suspicion whereas they viewed literacy in church and local factory with trust.

2.2.5 Reading and Societal Setting

Certain important factors that form the framework of society were reported to have locally and historically affected the literacy (especially reading) or education of social groups. Graff (1972, p.414) citing Stone (1969), lists such factors as follows : (1) 'social stratification'; (2) 'Economic laws of supply and demand of job opportunities'; (3) religion; (4) 'social control': the influence of the ideas held by the powerful and wealthy. Goody and Watt (1968, pp.67-68) add another factor to the list, namely oral or literate traditions. These authors suggest, for example, that unlike in oral societies, literate people in literate societies do not seem to have the same degree of forgetfulness, discarding or absorbing of past information. According to the authors, this is due to the shift from almost the entire reliance on face-to-face communication to reliance on permanent written communication which in turn seems to lead to sceptical and logical thinking and 'historical enquiry'.

2.2.6 Cultural Contexts and Reading

The concept 'frames of reference' is said to be a major issue which should be understood if we want to understand literacy or reading performance within or across contexts. It is related to the 'cultural orientation' which people bring to the reading event. As already stated above, the concept refers to the person's learning style: use of personal experiences and one's own cultural expectations regarding written text in reading. It is suggested that if a student comes from a culture (or has a frame of reference) different from that of the school (or from that of a textbook's writer), a 'frame clash' will occur resulting in 'a cultural bias in evaluations of ability'— see Bloome and Green, 1982, p.325). An example depicting such a situation was the one reported by Bloome (1981), mentioned in Bloome and Green (ibid., p.328), in which two students used different frames of reference to interpret the same text (one got his answers by explaining the logic of his responses without reference to the text, the other by rereading the text) but were ranked differently — the former was judged as less accurate than the latter. This point about 'frame clash', the studies argue, indicates that we must not always blame poor reading ability for poor reading performance as this may be due to 'a different understanding about the reading process and reading events' (ibid., p.327).

2.2.7 The Researcher's Comments

Perhaps the initial impression one gets from a skimming of the above discussion is that many of the social processes (or contexts) related to reading are not necessarily specific to

reading and that they seem to have a 'generalized effect' (to borrow Pearson and Johnson's, 1978, expression on a somewhat similar situation) on learning, education, and literacy (i.e., including writing) depending on the nature and breadth of each context. However, because reading is generally involved (formally or informally) in such concepts, the social processes mentioned in the above summary seem to be appropriately relevant to reading.

One theoretical construct which Bloome and Green have often quoted as being of major importance and specific relationship with reading performance is 'frame of reference'. Perhaps the novel thing about it here is that contrary to its dictionary definition describing it only as a 'cognitive' characteristic of a reader (see Harris and Hodges, 1981, p.123), the construct is treated in the summary as a socio-psychological factor (or influence) of an external connection, i.e., the specific culture of the reader. However, to say that it is significant in various reading/learning situations may not be always valid. According to Alderson and Urquhart (1984, p.63), the problem of 'frame clash' (or "different cultural backgrounds") may be severe in 'general areas of FL reading' but is 'likely to be less' so in situations where reading is used for specific purposes (for example, the "background assumptions" of a physics text " may well be recognized by a large number of physicists").

The third observation about the above discussion concerns the apparent exclusion or absence of other studies (also done mainly on reading in English as an L1) which, in the researcher's view, have contributed in the attempt of clarifying or understanding specifically the concept of reading as a social

process. Consider for example, the following social/environmental factors which have been suggested as being specific to reading behaviour and motivation to read in the three global environmental situations of home, school, and culture (identified by such studies):

At home, the 'reading environment/context' is generally characterized by, e.g., the reading habits of parents and child; availability and accessibility of a home library with plenty of books of various types; parents' encouragement and help for their child to understand or interact with text, and parents' literacy (see, e.g., Napoli, 1968; Greenberg, 1970; Buzzing, 1972; Fraser 1973). At school, the reading environment is said to involve broadly, e.g., the amount of reading requirements/assignments, time allocated to the use of books; the quality or quantity of textbooks; reading resources (a school library, peers or friends who read, etc.), and the reading habits of the teacher and peers (see, e.g., Kohl, 1974; Pearson and Johnson, 1978; Heather, 1980). The factors constituting the cultural context of reading are perhaps well summed up by Bamberger (1975, p.11) who presents reasons below for the difference in reading behaviour among countries:

- (1) The position of books in the country's scale of values as expressed, inter alia, through the proportional financial expenditure on book promotion.
- (2) The cultural tradition.
- (3) Opportunities for reading and here the school and public library play a decisive role.
- (4) The role of books in the school and educational system.

From the above discussion, one might also conclude that there seem to be four broad insights (or features) peculiar to

what could be labelled 'macro-reading approach' or even more specifically, the 'environmental social-psychological approach' (to borrow Marjoribanks's, 1974, expression) to reading explicitly or implicitly adopted by the abovementioned studies. The first insight concerns the fact that this type of approach deals with a complex and vague construct/term called 'the environment' -- it is complex in the sense that it provides, according to Bloom (1964, p.187) 'a network of forces and factors which surround, engulf and play on the individual'; and it is vague in that, according to Nisbet and Entwistle (1970, p.65) it 'sometimes [refers] specifically to the influence of home, parents and family and sometimes more generally to sub-cultures or patterns of behaviour and expectations in different social groups or classes'.

Because of its complexity and vagueness and the fact that certain human characteristics such as reading ability may belong to one rather than another subset of the total environment, environmentalists like Keeves (1972, p.31) and Marjoribanks (1974, p.13) suggest that 'the task of the researcher investigating the relation between the environment and a particular human characteristic becomes one of isolating, and then measuring, the pertinent sub-environment from the total set of environmental forces'. The present study focuses on the reading performance of mainly the individual (the preliminary year undergraduate, i.e., the unit for the major analysis here) and secondly of a small selected group (of the same level of students). Consequently, in this investigation consideration is restricted to a reading environment that is specifically linked with reading performance. This environment is here set in two situations: the home and

classroom/university (though the emphasis is here heavily placed on the latter), and these are in turn set within a specific but broader context, Libyan society.

The second insight profiting from the studies cited by Bloome and Green or by the researcher himself above is that of viewing reading basically as a social event and consequently the 'contextual constraints imposed on the readers are important' (see e.g., Carey et al., 1981, p.202) This contextual view of reading is suggested therefore to be included in any definition of reading in order to explore and understand the interaction alluded to here (Bloome and Green, p.332). In fact, Dechant (1965, p.15) wrote even earlier than the foregoing studies to underline the idea that reading is at base a social process:

When writing and reading became a means of communication and of recording and encoding facts, a sociology of reading was born. We became concerned with who reads what and why. We became concerned with the ways and means which reading might promote individual welfare and social progress...Reading quite frequently is done in a social group and always involves some degree of social interaction between the writer and the reader.

The third insight concerns the fact that the various social factors associated with reading seem to vary from one environmental situation to another within the same broader societal context due to the sensitivity of such factors 'to certain kinds of context'. This finding led Bloome and Green (p.334) to suggest that researchers examining the contextual effects on reading should focus their work 'on one rather than another aspect of context' and to interpret their results 'against the broader background' outlined in the authors' review -- this

suggestion is somewhat similar to that of Marjoribanks and Keeves reported above concerning the complexity of the total environment in general and how to go about studying it. Linked with this fourth insight is the assumption that argues that 'the role of reading in any society depends on many variable factors, and the yardsticks of one country are hardly ever those of another (Dimitrijevic and Gunton, 1975, p.37). The latter authors gave these illustrations to show the existence of this difference: (a) in the West (U.S.A and Europe), variable socio-economic status has often been reported as being responsible for or associated with variations in children's educational attainment (including reading performance) whilst in Yugoslavia (the authors' research base) and (also in Libya today) it is not a major issue because the variations between individual incomes do not fluctuate drastically nor do they 'indicate stratified groupings'; (b) 'the example of parents and favourable home circumstances' frequently quoted by western researchers cannot be 'counted upon' anywhere else (i.e., other than perhaps advanced countries), because in countries like Yugoslavia, illiteracy among Serbian adults was (as reported by Dimitrijevic and Gunton) relatively high in 1971 (21.9%). This is again true in Libya where the percentage of illiterate adults in 1985 was at 31%. In this present study, the socio-economic status variable was not used and the questions on the parents were restricted to asking about the father's knowledge of Arabic and English for the above reasons (see more about the latter variable in section 4.2.2.5 [4]).

Included in the fourth insight concerning the 'contextual view' of reading are the following four general methodological

requirements for studying reading as a social process: (a) the use of different data-collecting methods (e.g., "observations, interviews, and the use of other ethnographic techniques", Bloome and Green, p.329); (b) the use of different criteria for locating reading events such as the use of practices observed in informal events instead of relying on criteria derived mainly from assumptions of standardized reading tests (Heap, 1980, p.267); (c) the use of multiple regression techniques 'which provide a thorough analysis of the relative effects of contextual and individual attributes' (McDill et al., 1974, p.237); (d) the use of relevant and complementary insights from other disciplines to fill in the missing gaps or to help understand fully the concept of 'reading as a social process'.

2.3 Research on Academic Environment and Student Learning

This section will discuss examples of both empirical research and scholarly articles on the importance and effects of the academic environment (at university level) on student learning as a whole. Two reasons can be given for reviewing such works: (a) the paucity of research specific to examining social contextual effects on the reading of university students in general (let alone that of FL/L2 undergraduates); and (b) the fact that learning (including language learning) at university level can be generally assumed to involve some type of reading.

Research in the area of study behaviour in higher education has revealed that the effective context or environment may involve 'the teaching, course organization, subject areas, assessment

methods of university departments...the position of study space, residential accommodation, libraries, or teaching aids' (Ramsden, 1979, p.412), and that this environment may have a powerful influence on student approaches to learning. Of these many contextual factors, some key variables have been identified and correlated with students' learning strategies as being of special influence on academic performance, e.g., preparation for examination questions, demands of the syllabus and particular learning tasks.

2.3.1 Examination and Learning Strategies

An example of this type of investigation is that of Miller and Partlett (1974) reported by Entwistle (1980, p.25) and Ramsden (1979, p.414). The researchers' purpose was to investigate the effect of the examination situation on the learning strategies of small samples of Scottish university students. Their important findings were summed up by Ramsden (ibid.) as follows:

...the academic environment defined by examination in a Scottish university led to the employment of distinctive strategies of adaptation by different students. The authors show that one group of students (labelled "cue-seekers"), who went out of their way to make a favourable personal impression on staff, and who revised very selectively for examination, obtained the best degree.

Instances of such 'cues' sought by the students have been cited by Entwistle (ibid.): '...things like picking up hints about exam topics and noticing which aspects the staff favoured...'. This seems to be similar to the fact reported by Bloome and Green (above) about the 'thematic context' of reading embedded in

classroom context, despite the difference in student groups used (undergraduates vs. schoolchildren). An item on reading for examination (or credit) was included in the student questionnaire and staff interviews of the present study.

Entwistle (ibid., p.26) also reports on a study carried out by Dahlgren on students' use of a surface processing approach (which involves the memorization of discrete facts, ideas, or passages) in part as a reaction to the examination questions asked and the demands of the syllabus. He says the study shows '...that, whereas most students were able to answer end-of-year examination questions in ways which satisfied their examiners, this was often done by 'memorised algorithmic procedures'. He further quotes from the study how the students had reacted to the other contextual variable: the curricula's requirements:

'In order to cope with overwhelming curricula, the students probably have to abandon their ambitions to understand what they read about and instead direct efforts towards passing the examination.' (ibid.)

2.3.2 Student's Perceptions of Instructional Setting and Learning

Laurillard (1979) conducted a series of open-ended interviews and examined case studies of a sample of 31 undergraduate science students who were asked to talk individually about some real learning task. She found that the student's perceptions of the aims of the task, its requirements, and the nature of the teaching all influence his decisions about how to approach the task, and how to structure the subject matter. She

reported, for example, the case of one student who scored above average in comprehension learning (the use of broad focus of attention, seeing the task in relation to previous knowledge, and making use of anecdote, illustration and personal analogies (Entwistle after Pask, *ibid.*, p.27) on the "equilibrium diagrams" task, and above average on operation learning (narrow focus attention to details, and little use of illustration, anecdotes, or analogies (*ibid.*) on the "stereographic projection" task (understanding a pattern of three-dimensional structure) (Laurillard, 1979, p.406). Tracing the source of this difference in learning styles, Laurillard discovered that 'to some extent it was the student's different perceptions of teaching' (*ibid.*): the student's choice of the comprehension approach for the first task was due to the 'holistic overview' of its content (requiring understanding as a whole), and to the teacher's relating theory to reality; whereas his choice of the operation approach for the second task was due to the absence of the teacher's help and to the task's formal aspects such as 'the notation and mathematical procedures' (*ibid.*, p.407).

Ramsden (1979) has also administered a questionnaire and a series of semi-structured interviews to a sample of students (approximately 10 in each of six university science and arts departments), and produced evidence similar to Laurillard's conclusions, but based on a wider range of disciplines.

2.3.3 Implications of Environmental Research on Student Learning

Entwistle (*ibid.*) commenting on the applications and implications of such research on student learning, states that it

may help to raise 'the "level of awareness" of both staff and students' when it describes 'as fully and clearly as possible the ways in which students try to cope with the tasks and situations they meet in higher education ' (p.32). An example of implications of the research for the staff includes the following advice:

If staff expect students to use 'critical thinking' to alternate between imaginative insight and logical analysis, then the courses and examinations should not contradict these aims by being over-loaded with factual detail. Students clearly adjust their approaches to studying to take account of the explicit expression of the staff's educational aims -the comments on course work, and types of questions set, the defined syllabus, and the examination results. (p.33)

This research review has also offered some pointers for methodology: e.g., the combined use of questionnaire and interview techniques to measure, for example, the relationship between perceptions of learning environments and students' approaches to learning (Ramsden, *ibid.*, p.419).

It is important to note that many of the foregoing studies have equally referred to cognitive and affective factors, such as previous knowledge, interest, and stress and contextual variables affecting the student's learning. More importantly perhaps these studies are exclusively based on university situations in Western, developed countries. This latter fact about the research, has prompted Douglas (1977, p.40) to offer the following cautious remark particularly to those engaged in similar studies in the Third World:

All of the findings have to be interpreted...in the context of a university in a non-western developing country... It is essential to distinguish between the artefacts of Western education and the culture the artifacts came from...whenever the focus of interest

is on the culture of students - their ways of dealing with education, strategies for learning - great caution must be expected in interpreting the findings.

Reiterating Douglas's comment on this, we similarly argue that this suggests that what makes a successful student in London may not make a successful student in Tripoli. Therefore, data from foreign contexts may direct us to possible solutions to our local problems, but they need to be modified, if adopted, to suit our real and typical situations.

2.3.4 Impact of Educational Environment on EFL Teaching Programme

The importance of the general educational environment; and its impact on the English language teaching programme in non-native situations has been pointed out by Douglas (1977) and Swales (1980). Swales, for example, argues that it is necessary for the Service English Programme organizers to try to understand the "actual and local educational environment" 'in which the English language programme is to operate', particularly. One objective which may be gained from this approach is, according to Swales (ibid., p.3), 'to achieve a satisfactory level of transference from the English class to other situations'. Illustrating the relative validity of his argument based mainly on his teaching experience in the University of Khartoum, he indicates that when 'ESP programmes in the Third World or...elsewhere' encounter contextual difficulties and disappointments such as 'uncertain status, poor communications with other departments (in the university) and insufficient contact with the students' real world', they may succeed in

having, for instance, quality teaching materials, and adequate relationship with students, but they are liable to fail in, for example, 'appreciating the students' study behaviour, producing sufficient out-of-class study, and avoiding isolation from the rest of the institution' (p.2). Among some of the actual disappointments suffered by the ELSU (English Language Service Unit) in Khartoum University are the following ones reported by Swales:

...we failed to live up to the students' expectations in two important aspects... First, our consistently small classes and informal teaching methods had prevented us from becoming academically respectable in our students' eyes; secondly, our functional materials had deprived the students of an opportunity to utilize their rote-learning skills. (p.5)

Swales concluded by stressing the significance for the ESP course designer of knowing '...not only what his students can do or need to do but also what they would be willing to do and can be persuaded to do within the confines of their particular educational environment' (p.7). And of course, reading in a foreign language is a key activity that may need assessing in the light of the distinctions made in the previous sentence.

2.4 Studies on Reading Habits and Attitudes

Swales' article leads us to review further other studies more related to the impact of reading environment on FL/L2 reading. Research about this topic is scarce (as has already been indicated), therefore the following studies on the reading habits and interests of L2/EFL learners might serve our two aims here: (1) to illustrate the existence of reading contextual influence in

FL/L2 reading situations; and (2) to show the importance of the construct 'reading habits' with respect to reading ability since it is an issue central to the present investigation. The method of using questions on reading habits to infer external (contextual) influences affecting reading behaviours is cited by Lamme (1974, p.26) who in her review of influences upon reading habits has reported many studies employing this method. According to this author, the studies were able to deduce influences such as 'accessibility of books, book recommendation, environmental influences of the home and the classroom, and the influence of programs of teaching strategies'.

The studies given below fall mainly within this scope of research (i.e., within the first aim), but studies on the relationship between reading habits and reading abilities do not seem to be common in the FL/L2 reading literature (as evidence, ERIC data base and Index to Theses have been searched recently by the investigator and yielded no relevant work on this point, except one study by Douglas, 1976—see a discussion on the latter below). However, in situations where English is spoken as a native language, several studies on the subject at issue have been made (e.g., Napoli, 1968; Sauls, 1971; Lamme, 1974).

Lamme, for example, has done a longitudinal study in which 65 upper elementary students in a mixed rural/urban school (in U.S.A) were involved. The students' book reading habits were measured by data from their reading records (in a questionnaire format) which they kept over a three-year period (4th, 5th, and 6th grades), and from informal interviews conducted with them. These data were then compared with the students' scores on two

standardized tests (one for reading comprehension; one for critical reading). Pearson correlation was used to see if there was a relationship between the reading habits and reading ability of each subject. Lamme did not find a strong association between the two concepts (except a very minor one—between 'the habit of seeking out books by known authors' and reading ability measures). Realizing that the sample used in the study might not be representative, Lamme called for more studies to be done on the topic to verify her findings. She also concluded that because the scores on her tests had 'little relationship to the reading habits documented in [her] study', teachers/researchers should gather information on the 'actual reading [as opposed to "test reading"] done by children'. Apart from her limited sample, Lamme did not use a multi-variate technique like multiple regression to project a more global and clearer picture showing which habit(s) in relation to other various habits mentioned in her study consistently account for the variation of scores on each reading test. In fact, Douglas (1976, p.138) referred to the need to use this method or a similar one when trying to establish any relationship between the reading habits and reading ability (although he did not employ it in his Botswana study). Also, Lamme did not tell us how to get objective and quantifiable data on the 'actual reading done by children'. Nor did she include items about other media possibly competing with book reading, e.g., comics, and television, in her questions about the children's reading habits.

Turning now to the research studies on the reading habits in FL/L2 situations, we find that such works have shown that although

many students acknowledge the importance of reading, there is little reading done in the classroom, and much of the reading observed outside the syllabus is either translated materials into L1, sporadic and haphazard, and/or mainly fictional reading. The research has also indicated that the assumption 'reading takes care of itself' has not been demonstrably justified. Certain contextual influences have been suggested as being possibly related to little reading, though they are not necessarily the same in each case study.

2.4.1 The Yugoslavia Study

In one such study Dimitrijevic and Gunton (1975) conducted by means of a questionnaire a survey involving 177 arts university students and 171 school children in Belgrade, Yugoslavia, in order to discover something of their reading experience and to organize an EFL literature course accordingly. They found that reading was neglected in EFL teaching: e.g., in an answer to a question about the number of books read in a foreign language 'the majority, 45 per cent of the 4th-year students had not read 50 books in English' (p.40). The authors commenting on this finding, remarked that '...for literature students in their 4th-year this is far too low' (ibid.). They also reported that '...in the first year, 8 per cent had read more than 50 books in English, while 63 per cent had read between one to ten books' (ibid.).

The contextual factors mentioned by the authors as possibly accounting for the limited reading of their sample, were: (a) insufficient time (claimed by 82% of the sample); (b) "closed access" library facilities (approximately one student in four used

the library); (c) difficulties in obtaining books (claimed by 33% of 1st-year students and 20% of 4th-year students); and (d) the restricted scope of the university syllabus (e.g., three students as opposed to 49 pupils were reading a book outside the syllabus). However, such environmental constraints have been speculatively inferred by the authors and needed direct enquiry. The study does not also suggest any way of improvement except generally urging '...the re-assessment of the role of reading, an examination of methods for improving students' present experience and the introduction of a systematic programme designed both to extend students' awareness of books and to improve their reading skills' (p.45).

2.4.2 The Papua New Guinea Study

Another study of the reading habits and preferences of the English-medium students at Papua New Guinea University of Technology (Smithies, 1983) has similarly revealed the relatively little reading experienced by the students in their subject areas. The study's findings on the preferences of a group of about 400 students showed that the students did little course-related reading (18% read professional books) while the rest mostly read a work of fiction and comics (many of which were borrowed from friends and not through the library). The author also reported that there was little testing done on course texts (47% of his random sample of 100 interviewed on their reading habits said that there was low library use (40% used the library 3 times a week and 6% used it daily). His findings on the actual use of the library based on the library's statistics confirmed his questionnaire

results that '...a significant percentage of overall borrowings was in the fiction section...and this was markedly so among the staff' (p.115). However, Smithies argued that even this non-study-related reading done was insufficient (the majority read one book or less a month). He then concludes by blaming the academic staff's low emphasis on professional reading for the students' neglect of study-related reading (books and periodicals), and for their low library use. Another contextual factor identified by the author as the possible cause for the students' poor reading habits was the difficulty of the prescribed textbooks (combining difficulty of subject and language): this factor led the students to consider 'reading as a chore'. Smithies further suggests four ways of improving such a situation: the staff should require and encourage students to read by (a) making sure texts are read, e.g., by short quizzes, (b) using simplified texts, (c) urging them to write book reports, e.g., on professional texts or novels, and (d) urging them to use extensively the university library facilities, e.g., by a quiz on a fact hunt, etc., (p.117).

2.4.3 The Greece Study

Contrary to the above studies, the Greek subjects of this investigation (N=1,424 learners of public and private urban secondary schools) were reported to be reading extensively: the majority read newspapers daily and more than two books monthly. The researcher (Sikiotis, 1981) distributed a questionnaire to the various schools asking the students about their reading habits and preferences, and then processed their answers by a computer. He found that the students' motivation to read might be ,according to

the students' self-reports, related to: (a) their favourable attitude to reading, 'the pupils who [were] keen on extensive reading [were] not urged to read although 40% of the pupils' parents [did] try to make them read more'; (b) the leisure time available which was reportedly dependent on 'personal and family routine and [on] time devoted to homework and extra-curricular activities; and (c) the availability of school libraries (p.301). Sikiotis's very short account of his survey (published in ELTJ) lacks, however, some precise and useful information. For instance, there is no mention of the language in which the sample was reading extensively--you have to infer that (i.e., a certain foreign language) from his general and very brief introduction to his account about the importance of extensive reading to FL learning, and from his one-line broad footnote about a type of private school, 'Frontistiria' in which FL is taught outside school hours. Nor is there a mention about the rate of response to his questionnaire, the number of schools involved in the survey (only types cited), or the practical purpose for which his study was made.

2.4.4 The Botswana Study

In contrast to the foregoing studies, one researcher (Douglas, 1976) investigating (among other projects) the reading habits of a select sample of 97 bilingual (English and Setswana) secondary-school Form Five pupils in Botswana, compared (using chi-square) the pupils' responses about their reading habits (elicited by an interview) with their scores on a cloze test. Douglas found that 'there was a significant relationship between

reading ability in English and in Setswana [L1], though not a very large one' (p.1). Examples of this association included the following:

(a) 'the high scorers [on the cloze test] appeared more sure of their reading interests [e.g., reading about sport, recreation and adventure, etc.]' than the low scorers who 'spread their preferences over a larger number of topics';

(b) 'the high scorers used more time for reading [e.g., found at least three chances to read in 3 days] compared with the low group; (c) the high scorers used more reading sources outside the school than those of the low group.

Although Douglas found most of his results following the expected direction as the examples above, there was a 'break' to that caused (according to his account) by the habit of magazine reading -- the low group practised this habit more frequently and extensively than the high group.

On the whole, the results of the Botswana study on the point in question seems to contradict those of Lamme's study (reported earlier) but the use by both studies of different methodology (interviews vs. reading records; m/choice standardized tests vs. cloze tests), analyses (parametric vs. non-parametric statistics), and sample (L1 vs. L2 learners) might explain such a discrepancy. Moreover, Douglas appeared to be rather cautious about his study's findings when he called for the use of 'more sophisticated techniques of analysis such as factor -- or cluster analysis...to discover the nature of the relationship [between the pupils' reading habits and their reading ability] more clearly' (p.143). In this present investigation, this relationship was analysed by

one such technique (standard regression procedure) for its relatively precise conclusions.

Whether the high scorers with good reading habits (in English) were possibly affected by a favourable reading environment was indicated indirectly and speculatively by Douglas in another descriptive analysis of his interview results (using percentages). He suggested, for instance, the following personal and external factors linked with the extensive English reading of his sample: (a) the use of the school library for pleasure reading (claimed by 85% of the sample); (b) the use of a relatively adequate time for this reading (e.g., an average of 4.5 hours/week); (c) the great variety of English reading materials available from a variety of sources (national and foreign libraries, and bookshops, as well as government and community published materials). Douglas, on the other hand, argued that the pupils' little reading in Setswana (despite its importance as a "multiplier of information") was possibly due to the lack of relevant material in Setswana, and the difficulty of access to the sorts of material they wanted in this language (p.140).

Douglas also approached informally some of the teachers of his sample and found that the pupils' extensive reading came as a surprise to these teachers who wrongly thought that the pupils 'did little reading outside the syllabus because they were too busy for the exams; and that they were reading "trash-comics"'. On this finding, Douglas equally pointed speculatively to the possible relationship between this teachers' 'ignorance' of their pupils' interests in reading and the latter's 'sporadic and haphazard' extensive reading (P.133).

It is worth noting that both Smithies (of the Papua New Guinea study) and Douglas seem here to agree on the important influence of the teacher/lecturer on the extent and quality of reading done by the students, while they seem to disagree on the influence of comics and fictional works upon the reading quality of students: Smithies argues, for example, that 'comics, of course, reinforce an oral not a written tradition, and hardly constitute good models for formal writing' (p.113). Douglas, on the other hand, seems to endorse the findings of Fader and McNeil (1968), quoted by him in his study, which indicate that '...reading of the sort of material considered in this thesis [spies, detectives, comics, etc] can lead to improved reading in other areas' (p.136).

2.5 Studies on Contextual Correlates of EFL/ESL Reading Ability

Much of the research presented so far concerning FL/L2 reading habits has speculatively pointed to the possible links between certain individual/environmental variables such as library use, attitudes towards reading, home environment and availability of reading resources with FL/L2 reading performance. In this subsection, summaries are given of the available few correlational or predictive studies, known to the researcher, which have examined empirically some or all of the above constraints as well as others as potential sources of variation in the students' EFL/ESL reading performance scores.

2.5.1 Supply of Library Books

Two of these studies cited important evidence concerning the positive effect of a plentiful supply of children's books on L2 reading performance. Strieff (1978) has presented findings from her work with 479 Eskimo bilingual elementary children carried out in Alaska which examined the relationship between library use (the annual number of library books per pupil ordered by each of the twelve schools in the study) and the reading comprehension of such children. The author also investigated other factors related to the differences in the amount of use made in the schools of the extensive library/media items. These factors were: certain aspects of language proficiency, students' attitudes toward reading, preferences in reading materials, teachers' attitudes and classroom operation (e.g., time given to guided/independent reading). A variety of statistical techniques was employed in analysing the data including, among others, multiple correlations, one-factor ANOVA, and standard regression analysis. On the latter technique, Strieff gave this reason for its use: 'its appropriateness in the analysis of non-causal relationship among independent variables' (p.179). Results were gathered by cloze tests, questionnaires, and from school records (about library use).

In the various analyses done with reading comprehension as the dependent variable, Strieff found that library use was consistently the factor accounting for a highly significant amount of variance in the cloze scores (marked by the exact word-method) either alone (as the strongest predictor), with one factor, e.g., language dominance (English and Yupik-dominant groups in the high

library use schools), or with a few variables such as time given to guided reading/language activities, and readability of cloze passage content (Alaskan background and difficulty of materials).

In addition, the evidence presented showed the importance of teachers in such relationships: 'teachers were important as intermediaries in the effectiveness of Library Use' (p.219), and that among the strongest factors related to library use were '(i) teachers' attitudes toward and time given to planning instruction; (ii) guided reading time, and (iii) teachers' years of experience...' (p.223).

The second investigation was the large-scale survey of the ESL reading competence of Fijian pupils (N=1,234) in grade 6 reported, along with other surveys, by Elley (1984) who conducted it with Mangubhai in 1979 in 54 schools of Fiji (a Pacific island). Results of the standardized reading comprehension test (of multiple choice type) revealed the insufficient reading competence of large numbers of these pupils (p.285). To identify the major correlates (possible reasons), apart from the obvious ones, e.g., learning in L2, of pupils' reading ability, a multiple regression procedure was employed. Unlike the previous investigation, certain aspects of both home and school were found to make the most important contributions to variation in reading performance. The 'home background factors [alone] accounted for over a third of the variance [in the children's comprehension scores]' (p.292). To explain this finding, Elley and Mangubhai cited the following specific and favourable home variables:

Children from homes where English was regularly used, where the parents were well educated, where socio-economic levels were high, where there were many

books in the home, and where parents took an interest in their children's school work, such children read English with greater comprehension. (ibid.)

For the school variables, the factor making the largest contribution among them was size of the school library (after removing the influence of home background from the analyses). According to Elley (1984, p.293), 'those schools with libraries of more than 400 books produced consistently higher mean scores than those with smaller libraries or none at all'. Although the author admits that other factors might account for the variance, he adopts the following 'optimistic' hypothesis, generated from this finding and that of his other small but comparable study done in New Zealand with a large number of Pacific island children: 'the availability of a plentiful supply of books is a prerequisite to reading growth' (ibid.). Based on Elley's account, Fiji and other Pacific islands 'have very few books for children's leisure reading' (p.293) and this paucity of books was due to two facts: (a) 'teachers [did] not value reading as a way of learning language, and (b) there was 'no indigenous children's literature' (Elley et al., 1975).

2.5.2 Type of School and

Home Language

A third study exploring contextual factors, different from those of the above investigations, is that of Cowan and Sarmad (1976) which examined the relationship between type of school and home language (English/Farsi) on the reading performance of pupils (N=184) from six Iranian elementary schools (3 monolingual; 3

bilingual). The study also attempted to see if pupils exposed to two quite different linguistic and writing systems (Roman/Arabic script) would show learning patterns for reading similar to those found in the St. Lambert experiment (Lambert and Tucker, 1972), i.e., 'English reading skills may be promoted via transfer from French cognates' (pp.82-3) Children were evaluated both in reading comprehension (using a modified cloze test) and vocabulary and mental maturity (in EFL and Farsi). Their results were then compared according to grade, type of school and home language using analysis of variance technique.

The general picture given by the study is that 'bilingual children did not perform quite as well as their monolingual counterparts in either language' (p.371) and that these bilinguals have developed 'two distinct attack strategies for reading the respective languages' (p.375). The major explanation presented for such findings was that they were 'due to a combination of cognitive processes and perceptual factors manifested in the written representation and the linguistic structure of the two languages' (p.373). However, the most evident conclusion which the authors have inferred empirically from the data is that 'reinforcement by the language spoken at home (L1, particularly if it is stressed in later grades) is a prime factor in the development of child's L1 reading ability' (p.369).

2.5.3 Other Predictors of

ESL Reading Performance

The Nigerian study of Williams (1981) expands on the above Iranian study by looking into relatively much more environmental

and individual factors including those mentioned by Cowan and Sarmad (1978) (except the variable concerning the linguistic and orthographic differences) which might be related to reading performance in a different setting where English is a second language. These variables included: (1) language environment (family language background and opportunity for ESL reading); (2) reading resources (availability of English books, etc.); (3) attitude towards reading English (elicited by direct questioning); (4) exposure to the mass media (particularly in English); (5) type of school (9 public, 3 private where English is the medium of instruction throughout); (6) sex differences; and (7) age. The subjects were 368 Nigerian pupils at upper primary school level whose reading speed, comprehension, and vocabulary were tested (by modified m/choice cloze) and whose opinions and perceptions (on their language environment) were elicited by a questionnaire.

Williams examined his data by a step-wise regression procedure and his findings demonstrated that: '...type of school and reading resources were the best predictors of scores on the reading tests' (p.31). A combination of factors associated with type of school explained the variation in English reading performance. The main examples of such factors were: (1) language background (heterogeneous or homogeneous -- where pupils in the former did better because English had to be used by them and their teachers for interaction [p.44]); (2) accommodation (boarding school or day school -- where pupils in the former, particularly from a relatively low socio-economic background scored better than those in the latter with a homogeneous language background based on the assumption that the boarding school pupils would be 'better

readers because of certain advantages normally associated with a boarding school environment' [ibid.]); and (3) teacher qualification and experience (on the average, private school teachers had longer teaching experience and higher qualifications than their counterparts in the public schools, thus pupils of the former performed better in the reading tests [p.43]).

Williams also cited factors accounting for the difference in English reading scores by reading resources. It was found that pupils who said they read English books other than textbooks and possessed and used an English dictionary had scores superior to those who did not. On this point, the author argues inferentially that 'socio-economic factors' in the home and the school must have something to do with this finding : 'If a dictionary is available, pupils are likely to use it; and if they use it, their reading ability is likely to improve' (ibid.) (see more about the effect of dictionary use on L2/FL reading performance in section 4.2.2.4 [6]).

The author further reported that although attitude towards reading English contributed significantly to the prediction of reading performance, it did not separately correlate very highly with scores on the reading tests. He generally attributed this to the serious limitations of his direct questionnaire procedures employed to secure data on attitudes: 'pupils are prone to giving answers which they think will please' (p.45). In the present investigation, attitudes towards reading were measured indirectly to avoid this problem (more about this is given in section 4.2.2.2).

To summarize the studies reviewed in the preceding paragraphs, there is experimental evidence that certain selected external (or environmental factors -- though the above studies do not explicitly refer to them as such) play a significant role in the difference between poor and good L2/bilingual young readers. Of these factors, the one concerning the availability/supply of books and reading materials seems to be an important predictor of reading ability across cultures (of Alaska, Fiji, and Nigeria) despite the different names given to it here and there (library use, size of school library, and reading resources). Based on this, the present investigation included the factor under library use in the items of its student questionnaire. However, the studies appear to project other different emphases (predictors) which might be attributed to the different methods of collecting data (e.g., tests and/or questionnaires) and of analyses (e.g., step-wise or standard regression procedures), to the radical contrast between L1 and FL (e.g., Persian vs. English), or to the difference between contextual/cultural situations being used (Home/school; Iran vs. Alaska).

An obvious deficiency in the studies reviewed above is that none was located which dealt with Arab university FL readers (let alone Libyan undergraduates). Studies about subjects of this type have been, for the most part, non-empirical and/or basically non-contextually-oriented reports (again ERIC data base consulted recently did not produce any relevant research study in the Arab world except Douglas's, 1977 work referred to in some detail in section 1.1) and these reports will be discussed in the following sub-section of this review. They shed some lights speculatively

and/or implicitly on some background factors thought to be affecting reading education in the English language classroom in Arab higher institutions today.

2.6 Environmental Factors and EFL Reading in Arab Universities

2.6.1 Academic Style and EFL Teaching

The academic style in Arab higher education appears to work in a manner contrary to the urgent need of Arab countries to attain and retain literacy, which we can assume to be a prerequisite for cultural development. The available literature abounds with statements by Arab and non-Arab educators confirming this view: Tibawi (1972, p.211), whose interpretative review of the issue is still valid, summarizes it thus:

The problem is rooted in Arabic and Islamic practice in the age of decadence when reliance on memory and learning by rote, adherence to existing texts and respect for authoritative opinion became established at lower and higher levels of education.

As far as English, (the medium of instruction in most scientific and technical colleges) is concerned, it has noticeably suffered from three problems as a result of the above academic style: (a) the students' non-motivation, (b) the students' unpreparedness for advanced English skills, and (c) the carry-over of rote memorization as an end in itself from other disciplines and from English language instruction at school level.

According to Kharma (1978, p.81), the way examinations are conducted in Arab higher institutions can be detrimental to the motivation of students for English:

Arab universities, including the University of Kuwait, accept students to departments where instruction is given in English by virtue of their overall performance on the General Secondary School Certificate examination irrespective of their standard of English proficiency. The only department which usually sets down a minimum standard of proficiency is the Department of English Language and Literature. In such state of affairs why should the student waste very valuable time working at the improvement of his English before joining the university?

Evidence for the existence of the second problem was substantiated by Bending (1976) and Douglas (1977) in their studies on Egypt and the Sudan respectively. Both authors blame, however, two different key factors for the low English proficiency of students entering the university: Bending (p.317) concludes that the issue is caused by the 'old-fashioned' teaching method used in the secondary schools' which aims to teach all the language skills and Douglas (p.12) thinks it is the result of 'Arabicization in the schools'.

Concerning the third problem: memorization, the accounts reported by Lilley (1976), Swales (1980), and Smith (1981) show that this phenomenon is still observed in English language classrooms. Lilley (p.3), for example, found that Libyan students in the University of Benghazi (now Garyounis University) taking Arabic-medium subjects, e.g., Economics, Accountancy and Statistics did not show any 'positive transfer of learning skills' from such disciplines to English. He also added that these students' learning 'was heavily dependent on the dictation of lecture notes and rote memorization'. (See section 4.2.2.4 [7],

for more review of this issue which was included in the questionnaire of the present study).

2.6.2 The Teaching and Learning of Reading

English Texts

Having considered the above factors, one certainly expects the reading situation in Arab universities to be necessarily problematic. Indeed, most researchers and teachers of reading in such institutions categorically suggest this impression to us despite the limited coverage of their reports which often speaks of the reading environment of individual cases rather than the whole Arab academic setting.

In this sub-section, the researcher will attempt to give a short description of : (a) some of the different methods of teaching reading in English in some Arab universities, and (b) the main reading problems of Arab undergraduates in English language classes.

2.6.3 Teaching Reading in English

The methodology used in the teaching of reading English texts to Arab students seems to vary according to the status of English: as a medium of instruction to all or part of the curriculum, to the level of students' proficiency in the language, and to the skills demanded from the learners' parent colleges.

Where the courses are almost entirely taught in English, as is the case in Khartoum University, lecturers typically adopt, as Douglas (1977, p.23) has said, 'one of two approaches' for the reading task:

They may assign very little reading and depend wholly upon lectures (which may include dictated notes) and one or two texts to convey the subject to the student, or they may provide on the first day of the course a daunting 'bibliography' of reading intended to supplement the lectures, with little guidance on exactly how the reading might relate to the subject matter of the lectures.

Contrary to this discouraging situation in the students' parent colleges, the English language centres teaching English for academic purposes, e.g., have to consult references, have taken a more practical strategy in teaching reading in institutions such as Khartoum University.

Tadros (1977, pp.4-5) , for example, reported that the ELSU at the University of Khartoum had devised a 'reading-to-essay writing approach' for preliminary year students of economics and social studies who needed to write essays for examination purposes. According to the approach, the reading topics were selected after considering 'the syllabus... the previous examination papers, and informal discussions with students themselves'. Before writing their essays, the students were supposed to read the topics and answer questions testing their reading comprehension. On this point, Tadros emphasized the fact that 'the ability to answer comprehension questions, however searching these questions are, is not enough', because reading, as she put it, was not seen 'as an end in itself but as a means to an end [e.g., to write essays]...'. Examples of the reading exercises which the learners were required to do along with the writing of essays consisted of directions asking them not to read the given long passage immediately but to work out items such as 'putting jumbled sentences into the right order', paraphrasing,

inferencing, and answering questions about specific information (skimming and scanning).

More recently the practice of the ELC in King Abdul Aziz University (KAAU, 1981) provides another instance of a communicative approach to reading along the lines of the above procedure followed by the ELSU of Khartoum University but with different emphasis on the degree of guidance offered to the students when doing their reading activities. The Saudi ELC organizes most of its reading courses on an independent study basis: 'students select their own topics and tasks' (p.29). Because in KAAU only courses in science and technology are taught wholly or partially in English, the main objective of the Saudi ELC in the area of reading is 'to train students to consult references in English' or to train them to be able 'to comprehend laboratory sheets or lecture handouts'.

In both cases, in Khartoum University and KAAU, the focus, however, has been on intensive reading, i.e., intensive processing of lexis and syntax in short passages selected for the 'standard or difficulty of the language and for the interest they hold for particular group of students'. Teaching extensive reading has, therefore, been limited not only in the foregoing institutions but also in other Arab universities (e.g., in Libya) possibly because of the unsuitability of most available material 'in terms of its content', the inadequacy of 'library facilities and accommodation, including space' and/or possibly because of the heavy academic load on staff and students allowing no spare time to such an activity.

2.6.4 Reading Problems of Arab Students

With regard to the second part of this sub-section: the main reading problems of Arab undergraduates, most studies agree that the students' difficulties can be divided into two key symptoms: (a) a symptom related to speed: slow reading, and (b) a symptom related to comprehension: inability to understand inferential meaning.

As early as 1969, Al-Rufai (pp. 33, 172) found that Iraqi students were slow readers in English because of their mother tongue: Arabic, and because of the English language itself. When reading in Arabic, the Iraqi learner focuses on the word rather than the sentence: he can get the meaning of an Arabic passage even by reading it word by word, e.g., a word like 'takataba' 'gives the meaning of a five word sentence in English: they corresponded with each other, 'requiring narrow eye-spans'. This fact is said to have rendered the Iraqi students slow in reading English for which they need a wider size of recognition. Al-Rufai also blames the way language was taught in Iraqi schools for the problem of slow reading: she states that it was responsible for making the student more attentive to 'accuracy in reading aloud rather than to meaning'. She further goes on to explain that this training had 'built into the students the habit of vocalization: uttering each letter of each word even if the learners were asked to read silently'.

The discrepancy between English spelling and pronunciation is another problem slowing reading for the Iraqi student not found in Arabic. Al-Rufai (ibid., p.173) pointed out that the learner:

...needs to increase the duration of his eye
fixation to a right association between sounds

and shapes of words by eliminating all the extra letters which are not to be pronounced, by him who is used to pronounce each letter in a word in his own language, in English. In doing this, he tries to get clear perceptions of the meaning of the words he reads.

A third possible factor accountable for the low reading speed of Arab and other overseas students on their entry for British universities is, according to Weir (1982, p.98), 'the reverential attitude to books in general' which prompts them to read and summarize each one at the expense of their time and effort. This account is indicated by Weir as an 'impression' which Holes (1972), whom he is quoting, had got during his investigation of some aspects of EFL problems of two groups of overseas postgraduates.

Research on the second reading skill problem: the inability to understand the inferential meaning of English reading passages (an issue which seems to be common to Arab and Iranian students), reveals according to Hitchcock (1978, p.24) that 'it is not a linguistic problem but a reflection of the rote memorization in school'. Both Arab researchers. Al-Rufai (1976) and Ibrahim (1979, p.190) agree on the existence of this phenomenon among Iraqi and Egyptian students respectively.

2.7 Summary of the Review of Literature

This review has been divided into two major broad areas: one was theoretical, the other was empirical. The former generally attempted to show the importance and characteristics of the contextual view of reading in terms of its nature and methodology; whilst the latter presented a number of different kinds of



available research studies and practical reports (albeit small numerically) providing a framework for looking at possible connections between certain individual and environmental variables and learning/reading performance mainly in ESL/EFL situations. Examples of such variables (used also in the present investigation) included examinations, home reading environment (e.g., father's reading ability), student reading habits and attitudes, reading resources (e.g., library use, dictionary use), accommodation, rote-memorization and teacher's experience and attitudes towards reading. The review also indicated the fact that no project, as far as the researcher has known to date, was found which tried to focus directly on the socio-academic reading environment and its effect on the reading performance of Arab undergraduates -- except, of course, Douglas's project report (1977) mentioned in section 1.1, and even this was on general study habits and not on student reading behaviour in particular. It is hoped, therefore, that the present investigation will fill this gap.

CHAPTER THREE

LIBYA: AN EDUCATIONAL AND LITERACY PROFILE

3.1 Introduction

This chapter focuses on two important aspects of the reading environment: education and general literacy as they existed and are still developing in Libya. The purpose is to provide background information pertaining to these factors that might amplify or explain some of the findings of this study. For education, the chapter will first analyse very briefly the growth of the educational system from the early Ottoman times to the present, then give a sequential account of the kind of educational background which the subjects of this study would have before joining the university, and finally describe the main structure and functioning of Al-Fateh University as related to the theme of this thesis. For general literacy, the chapter will present an overall picture of the current situation concerning illiteracy, the availability of print media, leisure activities, and popular reading.

3.2 Education

3.2.1 Historical Development

Up until the latter part of the nineteenth century, the only type of schooling available to children in Libya had been religious (Islamic) education. Its main aim (in the primary and intermediate levels) was to enable the Libyan child to memorize

the Koran, teach him how to read and write, and do basic arithmetic and the rituals associated with religious prayer. Children (usually boys) completing this essential Koranic schooling could, if allowed by their wealthy and pro-education fathers, pursue it further by moving from kuttab (Koranic primary school) to zawiya (religious centre) or to ma'had (religious high school) and finally to one of the great mosque-universities (e.g. Al-Azhar Mosque in Egypt) abroad. In the latter institutions, more advanced subjects were taught including, for example, Islamic law, hadiths (prophetic traditions), Arabic grammar and literature, logic and astronomy. Students who succeeded in obtaining some or full training in this literate tradition could (depending on their level of schooling) aspire for positions such as faqih (traditional Koranic teacher), imam jam'eh (prayer leader in a mosque) or kadi sharia (judge of Islamic jurisprudence). Others who never entered the traditional school system (who were in the majority) would often follow an informal apprenticeship programme set up by their families by which they would learn their parents' trade and eventually practice it as a career. If any one in the latter non-literate group happened to require reading or writing for his business or pleasure, he would have to seek the service of those literate professionals in the community such as the faqih in order to, for example, read his letters or write a petition for him or the rawi (narrator) to listen to his reading of legendary folk stories in public coffee/tea houses.

Despite the introduction of limited secular schools (primarily in Tripoli) in the last decade of the Ottoman period (1899-1910) and the opening of comparatively more of these schools

in a few urban centres during the Italian occupation (1911-1943), secular education did not seem to win over Islamic schooling which continued to be the major type available to Libyan children throughout the above-mentioned two periods. The lack of clear policy with regard to education during the Ottoman rule (Monastiri 1982, p.316) and the existence of a coercive policy of 'Italianization' during the Italian colonial rule (Deeb and Deeb 1982, pp.24-25) were perhaps the obvious reasons behind the Libyans' continuing adherence to religious education. However, quantitatively, Koranic schools were not wide-spread enough under the Italians because of 'instability of the region and severe economic conditions' (El-Fathaly and Palmer, 1980, p.27; Ministry of Education, 1974, p.52).

At the time of independence (1951) the educational situation according to modern standards was deplorable. Statistical evidence for this was reported by Deeb and Deeb (1982, p.28) who, quoting Libyan sources, said

Ninety percent of the population was illiterate, there were no secondary schools for girls (apart from the teachers' training center), only 14 Libyans had received university degrees, mostly from Egypt, and there remained an urgent need for teachers and more schools at all levels of education.

Free universal education (primarily at the required elementary stage) was to see a slow and weak growth in the first decade of the monarchy (which ruled between 1951-1969) due to meager resources and poor management. Around the mid-1960s things began to change rather rapidly when the country was able to afford, for instance, to build more schools of various kinds and faculties in the University of Libya (founded in 1955) as a result

of the newly-found wealth from oil. However, this development did not seem to follow 'a comprehensive socio-economic plan'. Attir (1979, p.5) remarks that during the above-mentioned period 'all youngsters [turned] toward a general education leading to college' because of the lack of such a plan and the overwhelming popular support for education.

Since the advent of the First September Revolution in 1969 which deposed the monarchy, the educational policy and curricula and numbers of students, schools and universities have relatively undergone more fundamental changes than ever before to meet the growing needs of a demographically fast-increasing and economically socialist and developing society. In terms of policy, the most significant law re-organizing education was that of 1975 which expanded the compulsory education period from six to nine years of schooling. This law entailed, in particular, the encouragement of girls to continue their education beyond the elementary stage. For example, at the intermediate stage (the three compulsory years after elementary level), the percentage of girls of the total student population rose from 15.7% in 1969 to 41.3% in 1982 (see Deeb and Deeb 1982, p.74; George 1984, p.40).

In terms of curricula, in 1973 it was decided that content of curricula was to be 'Libyanized', i.e. reflecting Libya's own economic and political life style and context prior to 1977 (the use of mixed economy and rule of the Revolutionary Command Council). In 1979 it was again decided that content must be totally remoulded to conform with the new 'Jamahiriyan' society which Libya is now experiencing based on the ideas and concepts expressed in The Green Book (see Al-Quadhafi 1976-1979). The Green

Book calls for the abolition of all kinds of machinery and symbols of government and of all instruments of monopoly in politics, economy, social life, education, art, etc., to be replaced by mass participatory democracy (jamahiriya), public ownership and man's private ownership of man's basic needs, adherence to laws of nature with respect to relations between social structures and between social groups, and free participation and requirements of universal involvement in social activities. Adapting the content of curricula according to this cultural revolutionary ideology has been gradual and centred first on certain disciplines such as philosophy, law and political sciences. However, disciplines based on exact sciences have been left untouched (see Monastiri, 1982, p.319). The logic behind changing a subject like political science, for instance, was this: if Libya was ruled by the people (basic popular congresses) and not by a ruler, parties, and parliament, then the teaching of political science would be inappropriate. The writing of textbooks conforming with this drive for change did not seem to have been done during the first half of 1985 as in July of that year the Secretariat of Education began to invite Arab and Moslem writers to participate in a public competition for preparing textbooks based on the ideology of the Green Book (see al-Zahf al-Akhdar, July 22, 1985).

Concerning the numbers of students and academic institutions, there has been a considerable rise in such numbers at all school and university levels compared with those existing before and at the beginning of the Libyan Revolution. Statistics

showing this increase will be given below in the discussions about Al-Fateh University and general literacy.

3.2.2 The Road to University

This section describes the various stages of general modern schooling, based on the structure of the Libyan educational system (being in practice between 1969 and 1984), which our student sample is believed to have passed before entering the University. (In 1984, an outline of a new structure was announced emphasizing a more diversified and technologically-oriented secondary school education which was to be gradually introduced as from that year onwards).

When aged 6, the pupil was admitted to the first class of elementary school (there were six classes at this first compulsory stage); and when he reached the end of this school level (i.e., at the age between 12 and 14) he sat for an examination prepared by his school to obtain a certificate for elementary education. Finishing this stage meant that the learner had mastered the basics of reading and writing in standard written Arabic, arithmetic, Islamic religion, general sciences, art, physical education, history and geography.

In order to enter the next three-year compulsory stage, the intermediate school level, the student had to be under age 15 (learners of 15+ would have to join night time classes) and have completed successfully his elementary stage of education. At the intermediate school, the course of study comprised all the subjects of the elementary school plus English, elementary physics, chemistry, biology, and mathematics. English was

introduced at this stage as a basic EFL course using a series called English for Libya (Gusbi, 1966), consisting of three books for the three grades of intermediate school level, grades 7, 8, and 9. According to El-Mehdiwi (1975, p.43), quoting an official Libyan source, 'the aim of teaching English in the intermediate (preparatory) stage is to produce in three years an individual who is able to listen with understanding to spoken English, to speak current English correctly, to read with recognition the basic common structures and words of English, and to write a few sentences about a simple topic or incident'. This aim obviously followed the audio-lingual teaching method which emphasized oral communication and treated reading as a means by which orally introduced structures and vocabulary were reinforced. The average number of weekly class periods for teaching this basic English course was six (Arabic, as a subject, for example, was allotted an average of 7 periods per week) each of which lasted for 45 minutes. A certificate of intermediate education was awarded to the student upon passing a written examination set up and conducted by a committee of teachers at the district level at the end of the third year of the intermediate school.

Having completed the first nine years of compulsory schooling, the student could proceed to the secondary school provided that he was under age 18 (priority for acceptance into this level was offered to younger students). The general secondary school system consisted of three non-compulsory school years. In the first one, the student had to take a comprehensive programme of study while in the second and third years he had to pursue a specialized programme (either scientific or literary depending on

his interests and general grade average decided at the end of first year). Table 1 below shows details of such programmes.

Table 1: Programmes Taught at the General Secondary Level in All Public Schools in Libya

First Secondary	Second Secondary	
	Scientific Section	Literary Section
Religious Education	Religious Education	Religious Education
Arabic	Arabic	Arabic
English	English	English
French	French	French
History	Planning for	Planning for
Geography	Development	Development
Sociology	Mathematics (including	History
Mathematics	Physical Mechanics)	Geography
Physics	Physics	Philosophy
Biology	Biology	Sociology
Chemistry	Chemistry	Military Education
Military Education	Military Education	

Note: the programme of the third secondary includes all subjects of the second secondary (both sections) except for planning for development, which was not prescribed for that year level.
Source: Socialist People's Libyan Arab Jamahiriya (SPLAJ), General People's Committee for Education, Taqrir 'an Tatawwur al-Ta'lim khilal 1981-83 Muqa'dam ila Mu'Tammer al-Tarbiya al-Dawliya fi Dawri En'Egadiha 39. Mimeographed. (Tripoli: Secretariat of Education, General Department for Planning, [1984?], Appendix 3).

The EFL course for the secondary stage of education was again based on the audio-lingual method and a general level of vocabulary corresponding to 'A General Service List of English Words (West, 1953)'. It used a series called Further English for Libya (Gusbi and John, 1970), consisting of two books for the 10th and 11th grades respectively. Each week the student attended between 6 to 8 class periods (for 45 minutes each) depending on the grade and section he belonged to (see Table 2).

Table 2: Amount of Instruction in Arabic and English for Each Year in the Secondary School Level

Language	Number of Periods Per Week					
	1st Year	Literary Section			Scientific Section	
		2nd Year	3rd Year	2nd Year	3rd Year	
Arabic	8	10	10	6	6	
English	6	8	8	6	6	

Source: SPLAJ, General People's Committee for Education, Tagrir 'an Tatawwur al-Ta'lim khilal 1981-83 Muqa'dam ila Mu'Tammar al-Tarbiya al-Dawliya fi Dawri En 'Eqadiha 39. Mimeographed. (Tripoli: Secretariat of Education, General Department for Planning, Appendix 3).

After three years of study at the secondary school level, the student had to sit for a national examination prepared by the Secretariat of Education. If he passed this examination, the student would obtain his General Secondary School Certificate with which he could enter a university.

3.2.3 The University of Al-Fateh

In 1957 the main campus of what is now Al-Fateh University, located in Tripoli city, contained only the Faculty of Sciences which was then under the University of Libya. By 1972 the latter University had five Faculties (mostly technically-oriented) on its Tripoli campus, and by 1973 these institutions became the principal parts of the new University of Tripoli which was renamed as Al-Fateh University in 1976. Currently, the University consists of 9 Faculties (Sciences, Education, Engineering, Agriculture, Pharmacy, Petroleum Engineering and Mineralogy, Medicine, Veterinary Medicine and Nuclear Engineering), Postgraduate Department, and a Research Centre for Marine Biology.

3.2.3.1 Administration

The University, like other public organizations and institutions throughout Libya, is administratively and academically run by People's Committees, the highest of which is the University Committee (which has a role similar to that of the the Senate in British universities). The members of this Committee include the University General Secretary (Vice Chancellor), two Assistant Secretaries (Pro-Vice-Chancellors), one for Administrative Affairs and one for Postgraduate Studies, and various Secretaries for Faculties (Deans) and students (Heads of Students' Union offices at all Faculties), and two Secretaries for Staff and Students at the University level (Chairmen of Professors' Association and Students' Union respectively). The People (students or staff), to whom each of the above members belongs, choose the member for the University Committee by direct popular selection at their own faculty, association, or union. In addition to the offices of each member of the University Committee, there are various administrative departments such as those of Registry and Student Affairs, Postgraduate Studies, Libraries, and Personnel. The Revolution's decision about putting the administration of faculties (on work rota) in the hands of their teaching staff and students and not in those of clerical staff and other workers was in full practice in 1985.

3.2.3.2 Lecturing Staff

According to Deeb and Deeb (1982, p.41), there were 110 Libyan staff members and 340 non-Libyan staff members 'who held ranks from full professor to assistant lecturer at the University

of Tripoli in 1974-75'. The same source also mentions that 'during the above academic year the University of Tripoli had no Libyans holding the rank of a full professor' while it had 59 non-Libyan full professors. Although figures for the Libyan staff rose to 684 members in 1981-82, only 437 of that number were already teaching at the University and the rest were studying abroad. The number of expatriate staff in that year reached 614 members which was still higher than that of the Libyan staff. However, there were signs that this situation would probably be reversed in the future. For example, the figures cited by al-Jame'ha (1982, No.3, p.13) concerning Libyan staff for the academic year 1981-82 indicated that the University had 618 Libyan graduate assistants awaiting further training and 247 Libyan lecturers working for their masters and doctoral degrees in universities all over the world.

3.2.3.3 Students

The majority of students are Arabic-speaking Libyans coming from all parts of Libya. However, because Benghazi and Sebha (the other major urban areas of the country) as well as Al-Brega (a northern oil industry seaport near Sirte) have their own universities, the proportion of students of Tripolitanian links or residence is likely to be relatively higher than that of students from the eastern or southern provinces of Libya. In 1980-81 academic year there were 10710 internal (full time) and external students including students of non-Libyan origin. In the Faculty of Education alone, there were 1721 external and non-Libyan students of whom 115 were learning Arabic as a foreign language in the above year (see Obied, 1982, p.63). An increase in the total

figure of student population was estimated at 13606 students by al-Jame'ha (1982, No.3, p.13) in 1981-82. Of this figure, 3600 (26.4%) students (females and males) had University accommodation on campus. In 1981 the University had among its future plans for development a project concerning the building of a new hostel for 1500 female students.

3.2.3.4 Structure of Studies

First degrees are offered by all faculties of the University which also officially award postgraduate degrees. However, practically, only five of these faculties (Education, Engineering, Sciences, Pharmacy, and Agriculture) were reported to have given master's degrees in 1980-81 academic year (see al-Jame'ha 1982, No.3, p.10). Since 1979 most faculties began adopting a new degree structure called 'course-credit' system based roughly on an American system of similar pattern. The old system is characterized by the completion of a full academic year at every stage with a final examination at its end. However, the latter system is still maintained by a few faculties such as those of Medicine and Veterinary Medicine. The important features of the 'course-credit' system include a two semester system, core and elective courses, a final examination at the end of each semester (if a student fails a core course he must resit the examination in a subsequent semester only), and a department advisor to approve the student's choice of courses at each semester.

Despite the flexibility of the 'course-credit' system, the general feeling in 1985 was that the University was not yet well-equipped for it and therefore the latter should revert to the

previous structure. Perhaps the major reasons for such a feeling was the shortage of staff and classrooms to cope with the versatile teaching, advising and other technical and administrative demands (required by the 'course-credit' system) without which the system would not work adequately. No matter what system is used, the duration of the structure of studies at the University seems to range from four to six years of study according to which discipline the student belongs (e.g., four years for the Humanities, six for Medicine).

3.2.3.5 Medium of Instruction

Officially, the language of instruction at the University is Arabic and the use of a foreign language for that purpose is allowed in special cases provided that this is approved by the University Committee (the Senate). In practice, Arabic is the only medium of instruction in the Faculty of Education (except in the English Department) while English is the main medium in the technical or scientific faculties (e.g., Medicine, Engineering and Sciences). However, during the time covered by the present study, many of the courses in the Faculty of Agriculture were taught or studied in Arabic. Perhaps the main reason for the difference between these faculties in their choice of a medium of instruction over another is the difference in the attitudes of mainly their students towards the use of English as a language of science. These students as mentioned earlier have members in each of these faculties' popular committees which make academic as well as administrative decisions.

3.2.3.6 University Libraries

The University's main library occupies two floors of the modern five-storey building which originally housed four of its branches for Engineering, Medicine, pharmacy, and Agriculture. Now, these branches (except the library of Sciences Faculty) have been relocated at their faculties. According to the University's future plans, the main library is also expected to be resituated in another modern four-storey structure containing 2 million volumes. Until this project (for which tenders were invited in 1981) is completed and due to the limited capacity of the present main library, students and staff will most likely have to rely on the services of its branches at the nine faculties of the University.

Based on the figures available to the investigator, there were approximately 130,000 volumes and periodical titles in at least four of such branches (Education, Veterinary Medicine, Sciences, and Agriculture) in the academic year 1980-81. In one of the latter libraries (the library of Sciences Faculty), the average annual increase of up-to-date books was estimated at a minimum of 1000 volumes. All University libraries have either cabins and/or rooms for private study and research as well as sections for general reading. The seating capacity of such libraries ranges between 140 (e.g., at the Vet-Medicine library) to 300 persons (e.g., at the Agriculture library). According to Al-Malki (1981, p.90) and Faculty of Education (1984, p.8) a good number of students use the library more for chatting than for serious reading. Such a situation at the library of Education Faculty was so acute in 1984 that a cafeteria adjacent to its

premises was being changed into a large free reading room in order to reduce the noise inside the library. However, the same sources also mentioned that the library was usually packed with students using it for studying before and during examinations. On such occasions, the library stays open till midnight while during the term it closes at 8.00pm. Interestingly, Douglas (1977) reported similar findings in connection with his Sudanese library users.

So far, this description has been dealing with the general situation at the University of Al-Fateh. Before proceeding to discuss literacy in Libya, the second major reading environmental factor at the societal level, it is perhaps necessary to give a brief account on the faculties used in the present study.

3.2.3.7 Faculty of Education

This Faculty began in 1965 as a UNESCO-Libyan joint project called Higher College for Teachers' Training located in Tripoli. By 1967 it was annexed to the University of Libya and in the academic year 1970-71, the College was renamed as Faculty of Education. It is now the only faculty in the University which offers mainly courses in the domain of Humanities and Social Sciences. Besides training students to become teachers at the intermediate and secondary school levels, the Faculty also prepares students to be specialists in school librarianship, social service, and educational guidance. The Faculty's structure of studies has been patterned on the 'course-credit' system, referred to earlier, since the academic year 1980-81.

Although official statistics were lacking with respect to the total number of the Faculty's student population at the time

of preparing this study, it was possible to infer the general trend of such missing figures from a few available sources. Deeb and Deeb (1982, p.75) remarked that in 1974-75 the Faculty, compared with other University faculties, had a majority of students who were female. This high ratio of female presence at the Faculty of Education seems to have been maintained even in later years. For example, of the sixty one 4th-year students specializing in library and information science in 1981-82, 64% were females (Alam Al-Ma'Alumat 1982, No.3, p.61). In the Faculty's English Department, the investigator was able to distribute questionnaires (pertaining to this study) in 1985 to the total 1st-year student population (85 students in all) of whom 75% were females. The prevalence of females over males at the Faculty perhaps reflects the popularity of the teaching profession among educated women in Libya -- a profession which, according to Deeb and Deeb (ibid.) 'is more socially and culturally acceptable to families' of Libyan women than clerical work. Teaching for Libyan men, based on the researcher's experience, is just like any other profession which they can choose and practice depending on its merits and requirements.

3.2.3.8 English Department

In the academic year 1980-81, the Faculty issued, for the first time, its guidebook (in Arabic) outlining and listing, among other things, the objectives and courses of its English Department. A summary of such objectives was given as follows:

In conformity with the Education Faculty's obligation to participate in spreading the ideology of The Green Book, the English Department trains teachers who can comprehend

and use living languages which enable us to communicate with the outside world, translate our Islamic-Arab culture, and propagate the ideas of the First September Revolution. (p. 49)

Also, in a few lines the guidebook indicated that the Department offered courses in English language and literature such as linguistics, phonetics, grammar, contemporary literature and teaching methods. However, one glance at the list of courses offered by the Department during the above year will show that no translation course was mentioned at any stage of the Department's 4-year (or 8-semester) curriculum. In 1984, a translation course was introduced in a revised list of courses which broadly emphasized the teaching of the traditional language skills and gave relatively less importance to literature subjects. Of a total of 52 credits allotted to all core courses for all years, in the foregoing list, 25% was given to literature courses.

The Department's programme for first-year English specialists (first and second semesters) consisted of four core courses (or more appropriately, 'academic service skills'): comprehension (reading of short simplified passages), grammar (of post-secondary school level), composition (sentence to paragraph-level writing exercises) and language lab (primarily for oral communication drills). According to University regulations, the above students were also required to take two general prerequisite courses in Arabic language and political culture (the Revolution's ideology) and four elective educational/psychological courses (taught in Arabic).

The Department had in 1985 a total of 24 teaching staff members of whom 46% were Libyans with doctorate degrees and 16%

expatriates mainly from Canada and India. In addition to teaching core courses to English specialists, the majority of the above staff give EFL as a subject to various levels of students of other majors in several faculties (including Education) in the University. In this non-specialist EFL courses (otherwise known as scientific English in technical faculties), the staff appear to teach, on the average, more of a grammatical knowledge than study skills and devote an average of 2 hours a week to such courses.

3.2.3.9 Faculty of Veterinary Medicine

This is the first veterinary school in Libya which began its academic career with a small group of students (five males) and a single department for pre-clinical studies in the academic year 1976-77. By 1980, however, the Faculty had approximately 100 students (of whom 7% were females), five departments and a veterinary clinic. According to its handbook (1980-81, p.4), the Faculty's building has modern teaching facilities which 'were designed to accommodate a total of 250 undergraduate students per year'. The handbook also predicted that the above target would be reached in the few years following academic year 1980-81, based on the number of students enrolling in the Faculty at the time. Elsewhere in this study, it was reported that the Faculty had a total of 76 pre-veterinary students in its academic year 1984-85 - a fact which seems to support indirectly the above prediction at least with respect to the pre-veterinary year.

The syllabus of the latter is laid down by the Faculties of Sciences and Education which both follow the credit-semester system and send staff members to teach the syllabus at the

Veterinary-Medicine Faculty. The pre-veterinary syllabus for second semester comprises seven scientific and two language courses (one in English, one in Arabic), and one course in political culture. In 1980-81 there were 25 staff members (the majority of whom were expatriates mainly from western and Eastern Europe and India) teaching in the faculty as well as 2 demonstrators and 3 postgraduate students working for master's degrees abroad.

3.2.3.10 Faculty of Medicine

This Faculty was opened in 1974 and became the second school of medicine in Libya. The period of its programme of studies is organized into one preliminary (premedical) year and six years (including a final year for internship) leading to B.M.Sc. degree. As in the Veterinary Faculty, only premedical courses follow the credit-semester system (set up and administered by the Faculty of Sciences). In the first semester, premedical students take a syllabus similar to that given to the pre-veterinary students. But in the second semester, they study a basic core of academic and practical medical subjects including anatomy, histology, biochemistry and physiology and a course in political culture. Although an EFL (scientific English) course is not offered at this stage as a subject area, English is the medium of instruction for the premedical syllabus (except for the non-specialist courses). The Faculty had a total roll of 272 premedical students of whom 53% were females in 1984-85 academic year.

No official statistics concerning the Faculty's teaching staff were available for the above year. By inference, however,

the missing figure is likely to be slightly higher than 135 professors (the estimated total of medical school staff in Garyounis University, Benghazi in 1982-83 -- see the latter's guidebook for that year, pp.417-433). This is based on a conclusion drawn by Deeb and Deeb (1982, pp.41-42) about the difference between the Universities of Al-Fateh and Garyounis in terms of their teaching staff. The authors found that, on the whole, there seemed to be more professors at the former university than at the latter one in the late 1970s and predicted on the basis of the growing trend of moving toward Tripoli, the largest urban centre in Libya, that 'in the next decade or so the University of Tripoli [Al-Fateh] will emerge as the dominant one of the two [universities]'.

3.3 General Literacy

Having presented the highlights of formal schooling, the major tool responsible for the literacy of our sample of students, we now turn to describe briefly the kind of general literacy environment which our Libyan students were, and probably still are, exposed to outside their schools and University. UNESCO (1978, p.8) defines the literacy environment as 'the social structures and facilities geared to the uses of literacy', in other words it is the reading environment on the societal (as opposed to personal) level. An important part of this environment is the adult population with whom our students come into contact and interact. Therefore, this section will begin by looking into the status of this segment of Libyan population (whose estimated

total in 1984 was 3,62 million, including adult population -- see Barclays Bank, 1986, p.F) in terms of their Illiteracy statistics.

3.3.1 Adults and Illiteracy

As already stated, Libya had in 1951 approximately 90% illiterates, a figure which has comparatively been immensely decreased today as a result of extensive (basic and functional) literacy campaigns launched by the Libyan Revolution throughout the country, and the number of children now completing their studies. Such official campaigns have used the medium of television at one stage to spread basic literacy (the teaching of three R's) and promulgated a law making it obligatory for illiterates to attend courses. Statistics estimated and collected by UNESCO for 1985 show that 33.1% (or N=640,000, above 15 years) of the total adult population was illiterate. However, there was a difference in illiteracy between male and female adult populations. Of the above illiteracy absolute figure, 69% were females and only 31% males. Despite this current imbalance between the sexes -- a noticeable phenomenon encountered in many developing nations combatting illiteracy (see Oxenham, 1980, p. 3) it can be predicted, based on official estimates that as a result of the spread of compulsory education such a situation along with illiteracy in general will vanish in the near future. To substantiate this point, consider, for example, the great increase in the number of girls between the ages of 6 and 14 attending schools of compulsory educational level. As can be seen in Table 3 the absolute number of these girls quadrupled in 16 years,

although the proportion to the total student population at the compulsory stage rose by 14%.

Table 3: Number of School Girls at Compulsory Educational Level between 1969-70 and 1983-84 School Years

Educational Level	1969-70		1983-84	
	No. of Girls	Percent of Total	No. of Girls	Percent of Total
Compulsory (Elementary+ Intermediate school stages)	112754	32.4	461849	46.4

Source: For 1969-70 figure, Socialist People's Libyan Arab Jamahiriya (SPLAJ), Secretariat of Education, Munjazat Amanat al-Ta'lim wal-Tarbiya min 1969 ila 1976-77 (Tripoli: [1978?]), p.19; for 1983-84, Tagrir an Tatawwur al-Ta'lim Khilal 1981-83 Muqa'dam ila Mu'tammar al-Tarbiya al-Dawliya. Mimeographed.(n.d)

3.3.2 Opportunities for Reading

The other significant aspect of our students' literacy environment is the availability of reading material which, according to Bamberger (1975, p.24) 'plays an important role in awakening reading interests'.

The figures reported in 1979 for book production in Libya were for the period between 1969 and 1977. During these nine years, the annual output of books, excluding periodicals, increased threefold. In 1969 Libya published 146 new titles in Arabic while in 1977 it produced 487 (see Secretariat of Information, 1979, pp.78-79). The breakdown of such titles by general category for 1977 reveals that while social sciences represented 45% of total production, literature 24% and religion 2%, the pure and applied sciences accounted for 16%. According to

Quannes (1972, p.23) the general opinion of specialists in this field is that the latter sciences (for academic reading) and literature (mainly for general reading) 'should be on the same level (24% in our case).

The fact that Libya is an Arabic-speaking country which shares with the rest of the Arab world a common language, religion and social environment accounts for the wide supply and sale of Arabic books and periodicals in Libyan libraries and bookshops respectively. These publications are produced mainly by Lebanon and Syria which, of all Arab countries (except Egypt), still print and publish most of the Arabic reading materials. Non-Arabic books, mainly in English, are imported largely as textbooks and distributed accordingly to school and university libraries on the basis of more or less the needs of such facilities.

The only distributor of Libyan and foreign publications throughout Libya is now the Public Establishment for Publishing, Distributing and Advertising (hereafter PEPDA) which was founded in 1974. The law of the Establishment stipulates, among other conditions, that it should sell books to the public at low prices and that the Secretariat (Ministry) of Treasury will bear the difference between the cost and sale prices of such books 'in order to enable members of the public to buy them' (ibid., p.73). However, PEPDA is not the sole local book publisher. In 1984 the total number of Libyan publishers was 10 public organizations and academic institutions (including the Universities of Al-Fateh and Garyounis) of which PEPDA was relatively the largest producer of books. It alone had 600 titles, representing 53% of the total figure of titles (1194) exhibited for sale by Libyan publishers in

the second session of Tripoli International Book Fair held in 1984 (see Sharif et al., 1984).

Concerning the Libyan press, there were 15 weeklies and one daily, all published in Arabic in 1985. The estimated circulation

Table 4: Major Newspapers in Libya during February 1985

Title of Newspaper	Type	Circulation Estimate
1. il-Jamahiriya	political analysis	59735*
2. al-Zahf al-Akhdar	political analysis	58019*
3. al-Mizan	police news	25564
4. al-Reyada il-Jamahiriya	sport news	22804
5. al-Jame'ha	student news	15519*
6. al-Fajer al-Jadid	daily news	14940
7. al-Muntijun	labour news	14780
8. al-Mu'Addaf	employees' news	12830
9. al-Ard	farmers' news	12580

* Data also include circulation figures outside Libya.

Source: Calculations based on information gathered from PEPDA, Bayan be Tawzi'eh Asso'huf al-Mahaliyia fi Ni'qaat At-Tawzi'eh fi al-Jamahiriya wa Khaarijha. Mimeographed. (Tripoli: n.p.; n.d), p.4; and from an interview with a source at the Statistics Office of PEPDA in February 1985.

figures for one issue of these newspapers for January of that year show that only 9 newspapers had a comparatively wide circulation. Of these nine papers, four had relatively the largest circulation figures as can be seen in Table 4 above.

According to another mimeographed list issued by the Distribution Department of PEPDA obtained in 1985, Libya published a relatively considerable amount of periodical literature (approximately 20 titles including one for children and one for women only) in Arabic catering for various interests and professions during that year. Furthermore, the same list indicated that Libya imported an estimated total of 204 Arabic and foreign language newspapers and magazines. Linguistically, 35% of that total were English periodicals, 35% Arabic, 16% Italian and 10% French; the remainder were German and Turkish titles. The list, however, did not mention the circulation figures of these publications. But from an interview with a source in the above PEPDA Statistics Office (on 18th February, 1985), it was possible to get a general idea (albeit tentative) of the trend in this regard. Unlike the case with local periodicals, Libyan bookshops seldom return their unsold issues of Arabic or foreign press to the PEPDA Distribution Department. According to the above source, this is because readers in Libya tend to buy more non-Libyan periodicals than local publications. A sizeable part of these readers is perhaps the expatriate community employed in Libya who, according to Barclays Bank (1986) amounted to 'several hundred thousand foreigners'.

A book on the cultural development in Libya written in Arabic in 1979 reports that Libyan cultural centres (predominantly located in rural areas) and public libraries, controlled by the Department of Culture and National Guidance, totalled 172 in 1978 all over the country as against 68 in 1969 (see Secretariat of Information, 1979, p.50). It also mentioned that this department

expected to increase the number of specially-equipped vans used as travelling libraries for remote and nomadic areas from 5 in 1975 to 20 in 1979.

In Tripoli and Benghazi, the two most urbanized cities in Libya, one finds old and new specialised or professional libraries which belong to other public departments, research centres and learned societies. In Tripoli alone (with a total population of 820,000 -- more than twice the population of Benghazi in 1981 -- see Kezeiri, 1982, p.356), there is a large concentration of such libraries (approximately 20 in all excluding school and university libraries) whose collection of books and documents ranges between 1,700 (as in the Supreme Court library) to 19,255 volumes (as in the library of the National Academy for Scientific Research) (see The World of Learning 1987, p.838). In line with the socialist principles of the Revolution, bookshops owned by the private sector are now under the management of PEPDA which has also opened many new kiosks selling newspapers and magazines to the public at large.

3.3.4 Leisure Behaviour

Up until 1983 employed Libyans used to work eight hours daily. However, according to Bearman (1986), following that year 'a series of measures was approved [by the Libyan basic popular congresses -- see section 3.2.1 on this authority], lengthening the working day from 8 to 12 hours, introducing in some enterprises round-the-clock shifts' (p.274). Whether this includes all trades, neither Bearman nor Libyan official written sources inform us specifically on this point. The purpose behind the

change in working hours was 'to reduce the acute dependency on migrant labour...[and] increase the labour productivity of the indigenous work force' (ibid., p.274). The Libyan official week is six days and on the seventh day which is Friday, all Libyans take their weekly holiday. In cities like Tripoli and Benghazi, there are many cafes, a good number of restaurants, several cinemas and sport clubs and a few museums, as well as occasional local or visiting theatrical performances and intellectual or cultural gatherings.

But do many Libyans make use of such leisure facilities? The very little and brief evidence available so far concerning this point provides us with a rather tentative and negative answer to the above query on the whole. It reports other somewhat simple and/or traditional ways of social recreation by which Libyans tend to enjoy their free time. In a study (Attir, 1979, pp.52-53) about trends of modernization in Libyan society conducted in 1976 with a random sample of around 300 individuals from Tripoli, Benghazi and Baida, it was found that the majority of subjects often spent their spare time staying at home either to read for pleasure or entertain guests including relatives or going out to visit socially members of the extended family and close friends. The expectation that the majority would not eat in restaurants (a local cultural phenomenon) was also confirmed by the study. However, the study did not expect a low proportion of responses choosing a yes-answer to a question about going out to cafes; and wondered if this trend was due to a flaw in its many interviews or 'to a significant change taking place in regard to the traditional social role of "cafes" in Libya'.

Despite its finding, under a separate section on consumer aspiration, that 90% of its subjects owned televisions and radios and that television became a major source of entertainment throughout Libya (excluding some remote areas), the study did not include any of the two media under its section on leisure behaviour. But the popularity of television and more recently the video in connection with leisure time of Libyans is nowadays a self-evident fact which has been discussed (albeit with little regularity) in the Libyan press. According to an article on the challenge of such audio-visual media to book reading published in the January 24, 1986 issue of the Libyan weekly, Il-Jamahiriya, Libyan auditoriums were seen almost half empty on many occasions when public lectures or seminars on intellectual/cultural topics were held. The author of the article speculatively attributed the extremely low attendance in such gatherings to the growing appeal of television and video as alternative means of entertainment and information (see Osman 1986, p.20). Besides their national television programmes, the Libyans can receive programmes of other channels from near-by countries in the region.

3.3.4 Popular Reading

In the foregoing discussion about the availability of print media and library facilities in Libya, it was apparent in the light of the said official sources, that the provision of such media and facilities were generally on the increase almost from one year to another. It was apparent, however, that there seemed to be a gap between actual local print production (especially that of periodicals whose data were available but not very recent) and

potential requirements (considering the growing number of literate/educated Libyans amounting to around 67% of total population). This gap appears to be a phenomenon which all Arab states have and which they are 'making considerable effort to bridge by a policy of long term planning' (Quannes 1972, p.24).

A question which might be raised at this stage is whether literate Libyans do actually read for pleasure vis-a-vis the above-mentioned promising opportunities for reading and ostensibly adequate amount of leisure. In the absence of research on this point, the short account given below of popular reading in Libya is unavoidably based on assumptions of a few Libyan writers.

Under leisure behaviour in this section, the study on Trends of Modernization in Libya (cited earlier) has hinted that the majority of its sample said they read for pleasure and preferred to do so at home rather than at the lending library or anywhere else. Furthermore, the study revealed that the majority of the above reading group said they had between 20 to 100 books in the house and that of these readers, '24 percent read daily..[and] 15 percent read several times a week' (p.53). However, the study did not distinguish between groups (i.e., females/males or urban/rural) when measuring leisure behaviour including reading. Thus, the author used general speculation as he made this explanation for the above favourable attitude to reading: 'such response can be expected among city dwellers' (p.53).

Further evidence of the popular desire for book reading came from a few Libyan press reports and one survey (though less systematic and direct) on international book fairs held almost annually in Tripoli city since 1980. The general trend depicted in

these writings is that literate Libyans seem to take full advantage of these annual events and buy as many up-to-date and varied books (mainly in Arabic) as they can afford or obtain in spite of the high prices of such books imposed by their Arab publishers participating in the fairs. A case in point was the second session of Tripoli International Book Fair (hereafter, TIBF) held in 1984 on whose publishers a limited and small-scale statistical survey (Sharif *et al.*, 1984) was conducted to identify the types of books that were in demand. In this book fair, it was observed that there were so many visitors rushing to buy books that the fair's initial period had to be extended for extra days. It was also observed that of the 2,511,250 total copies representing 7632 different titles (mostly in Arabic) exhibited for sale by 119 Arab and European publishers at the fair, approximately 1,142,302 copies (or 45%) were sold out to the public (*ibid.*, p.29). This number of sold copies was described by the above survey as a sign of relatively 'unexpected strong interest in books' (*ibid.*, p.1). The survey also mentioned that the book types in major demand at the fair, according to order of popularity, were as follows: (a) children's literature; (b) Islamic studies; (c) domestic interests; (d) general literature including romance; (e) art and hobbies; (f) history and biography; (g) social sciences; (h) languages; (i) philosophy and psychology; (k) general knowledge; and (l) applied sciences (particularly computer science). A similar order of preferences was also reported by Ezzou and Shalaby (1981) and Ezzou (1982).

But is book-buying an index of book-reading? The above survey did not answer such a question nor did it clarify to us the

categories of visitors to the fair buying each type of book cited in that list of preferences. These missing data induce us to listen also to other contrary views expressed in the Libyan press and Alam Al-Ma'Alumat criticizing literate Libyans for not reading and identifying (albeit speculatively) the kinds of persons interested in reading among them. Some flavour of such a criticism is given by the following quotation (translated by the researcher) from an article entitled 'Why don't we read?' which appeared in the October 14, 1983 issue of the Libyan weekly il-Jamahiriya:

Of the many literates living among us, only a few who seem to read for pleasure or academic purposes. Also a similar number seems to write in our local papers. The majority, however, do not read nor write but appear to be preoccupied by the worries of work, diverted by laziness, and alienated by lack of knowledge and information. The practical proof of what I say can be deduced from the inadequate number of publications printed in our country. Consider, for example, our periodicals. The newspapers which should be published daily as is the case all over the world are published weekly or fortnightly. Similarly, instead of being issued monthly, our magazines appear every three months. Even research papers and studies written for our professional journals are few in number, and not profound, requiring further reading and research... (see Bad'lah, 1983, pp.19, 22).

Besides his speculative agreement with the above writer on the existence of a small minority of readers (in the Arab world in general including Libya), Sharif (1983, pp.43-45) lists those avid readers (no specific nationality was given) within such a minority, quoting a rather outdated field study conducted by the Arab Centre for Research and Development in 1966. According to the latter study, secondary school teachers were at the top of the

list followed by university students while professionals such as doctors and engineers came last.

However, based on the writings of Sharif (1983) and Botros (1978) on the problems of book development in the Arab world, variables related to reluctance of Arab literates to read seem to be much more complex than those hinted in the above quotation. Both authors implied that the varied, up-to-date (in content), well-printed and designed Arabic books were scarce in number and, if they existed, they were not frequently published and sold at local bookshops. The scarcity of such Arabic books is believed, according to both authors, to be due to technical problems pertaining to printing and designing the Arabic book, economic problems such as 'high cost of mailing or transporting the book', and legal problems such as 'lack of support for authorship, copyright, translation and verification'.

It should be noted that the Sharif *et al.* account on the drive for buying books in TIBF does not, in the opinion of the researcher, contradict Sharif's (1983) presumption about the existence of a small minority of readers in the Arab world because (1) his TIBF's account was specifically on Libyan book-buyers; (2) it was uncertain if such buyers were also dedicated book-readers; and (3) the TIBF's session was annual (i.e., occasional) and so was perhaps the speculatively reported 'strong interest' in books indicated by the said 45% sales of books.

From the above studies and articles on popular reading in Libya, it can be seen that a need for a systematic and thorough research on this aspect of literacy environment is in order. The present study attempts to contribute to filling in this gap as it

has explored in the course of its investigation the reading habits and attitudes of one important segment of the Libyan reading public, the preliminary-year university students and their Libyan lecturing staff.

CHAPTER FOUR

METHODOLOGY

4.1 Introduction

This chapter deals with the methods and procedures adopted to realize the main concepts cited in Chapter One. The study's hypothesis and questions associated with it refer to two major concepts: 1) the socio-educational reading environment; and 2) reading performance. Under the first one are these subconcepts: leisure reading (i.e., student's reading habits and attitudes, and reading facilities), academic reading (i.e., assigned reading, reading strategies, reading difficulties, reasons for reading, etc.), personal background, teaching staff reading habits, and classroom reading behaviour. Under the second one are the two subconcepts of reading ability in English and reading ability in Arabic. The theoretical relationship sought by the study is between the above major concepts: it assumes that the socio-educational environment as reported by students is significantly related to reading ability in English and Arabic (particularly the former).

The other reading environmental concepts, staff reading habits and classroom reading behaviour, are to be described to serve as background information for the interpretation of the above conceptual relationships.

In order to obtain quantifiable data about these concepts, a group of data-collecting instruments were used as is shown in the following list:

<u>Concept</u>	<u>Instrument</u>
Socio-educational reading environment (reported by student)	Questionnaire
Reading ability in English	Cloze Test
Reading ability in Arabic	Cloze Test
Staff reading habits	Structured Interview
Classroom reading behaviour	Inventory

Thus, empirically, the central research hypothesis can be reworded respectively as follows: that there is a substantial relationship between the variables related to student's socio-educational reading environment ascertained by the student's questionnaire and the performance on each reading test (English cloze test and Arabic cloze test). (See the conceptual model adapted for this study in Figure 1).

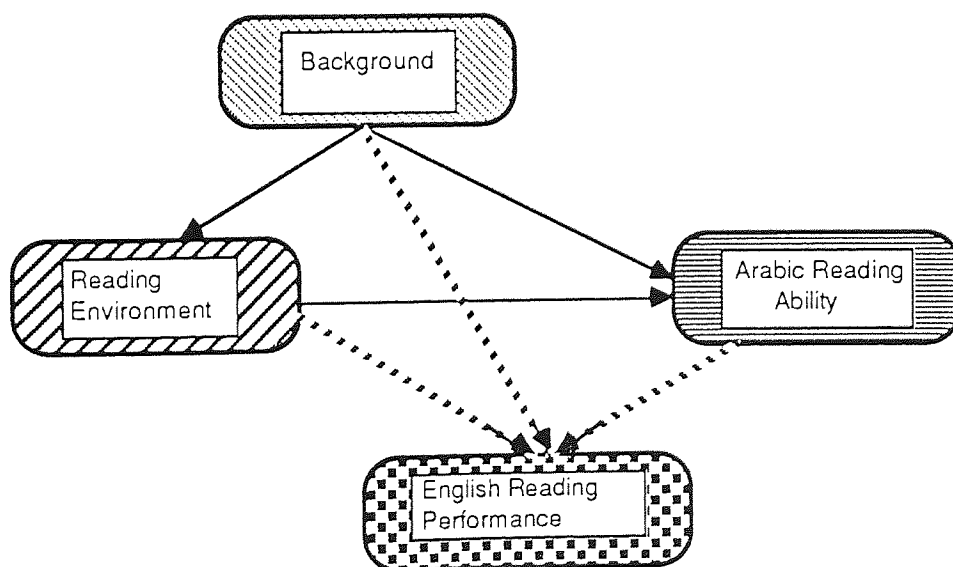


FIGURE 1 :
THE CONCEPTUAL MODEL ADAPTED FOR
THE STUDY

Below is a brief account of the experimental research design by which the above relationships and descriptions were tested and explored respectively.

According to the list mentioned above, the research data were divided into five blocks. To form the first one (questionnaire data), questionnaires were given to the accessible population of the three faculties which use English as a medium of instruction: Education (English Department), Medicine, and Veterinary Medicine. Because there were broadly two different disciplines, English and Medicine, involved in this study, the students of each major discipline sat a different and relevant cloze test whose scores constituted the second block of data. To obtain the Arabic cloze data, the above accessible population sat the same Arabic test. A sample of 20 sessions representing First-year English and Prevet-Medicine syllabuses were selected and observed by the investigator. The objective was to form the information required for block four (classroom reading behaviour). Actual teaching staff members of each of the above disciplines were also interviewed.

To test the central hypothesis adequately, it was necessary to get a relatively large number of the study's accessible population, each of whom completed all the three instruments of questionnaire, English test, and Arabic test. This procedure has reduced the number of the study's sample from 215 to 125 (the

total study sample). Figure 2 illustrates the numbers participating in the three major instruments of questionnaire, English tests, and Arabic test, and how the total study sample was selected.

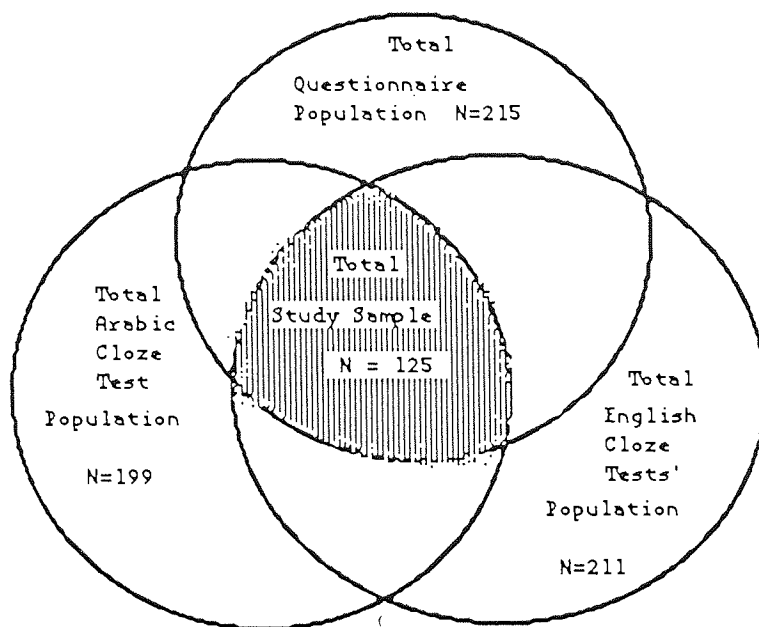


FIGURE 2 :
THE STUDENT
NUMBERS
PARTICIPATING IN
THE THREE MAJOR
INSTRUMENTS OF THE
STUDY

The following section will discuss how the questionnaire schedule was constructed including how the socio-educational reading environment reported by students was defined and how each of its components was measured within the self-administered questionnaire.

4.2 Section One: The Questionnaire Schedule

4.2.1 The Definition of Reading Environment

In constructing the student questionnaire, the investigator confronted the problem of definition. As indicated in section 2.2.7, the concept 'reading environment/context', in which reading instruction and performance or use occur, seems to have different forms and interpretations. For example, in Chapter Two we are informed about the societal cultural context, the school-based reading context, the home reading context, etc. Also mentioned in the same chapter is the difference in contexts according to whether the reading performers or users are children learning to read or adults reading to learn or entertain themselves and whether these individuals and groups live in advanced or developing societies, in L1 or FL situations. Thus, it appears that the concept 'reading environment/context' can be many and overlapping contexts and sub-contexts; each influences reading performance and development both directly and/or interactively among each other.

Owing to the complexity of the concept, the review in Chapter Two suggests that the researcher studying it should narrow his focus, i.e., investigate the contextual factors that are practically researchable and relevant to the central purpose of

his project. In our case, the study set out to examine the socio-educational reading environment of preliminary-year undergraduates in an Arab university and to explore its relationship with the English reading performance of such students. Therefore, the reading context that should be our main concern is essentially assumed to be made by (1) the availability and requirement of print reading -- or what the students read for pleasure and learning; (2) opportunities of using reading -- or how much time they spend on and where they practice their reading; (3) motivation to read -- or how much the students value reading; and (4) reasons for and difficulties in reading, particularly in EFL -- or what/who affects the students' reading.

In developing this definition of the thesis' particular environment, the investigator was influenced by two main sources (e.g., Douglas, 1976, 1977; Smithies, 1983) who were experienced in such a context and projected population, and indirectly by other works (reported in Chapter Two), particularly those conducted in L2/FL situations. Thus, based on the above definition, it was decided that the questionnaire schedule should seek to assess these reading environmental variables: leisure reading (social-psychological aspect of environment), academic reading (educational aspect of environment), and personal and home background (personal and social aspect of environment).

Having limited the global concept of reading environment to the foregoing three aspects, the investigator began to consider how this concept could be quantified. As Belson (1981) says, the science of question design still remains dependent on 'provisional guidelines' which consist of 'published research findings, common

sense or common experience' (p.389). The investigator reached decisions in the light of the above 'influences' and others in the literature on the kind of indicators he was concerned with for each aspect or subconcept of the environment under study as follows:

<u>Subconcept</u>	<u>Indicators</u>
Leisure reading	Reading habits Reading attitudes Reading facilities
Academic reading	Reading involved in homework Requirement of textual resources Ways of reading texts Reasons for Reading Problems of reading in English Use of dictionary Use of memorization
Personal background	Age Sex Accommodation Father's reading in English Father's literacy in Arabic Linguistic ability

4.2.2 The Measurement of Reading Environment

However, another decision had yet to consider precisely the areas, activities and length or frequency of time, where applicable, under each indicator. This was arrived at on the basis of the 'provisional guidelines' referred to earlier by Belson and also by Moser and Kalton (1971) and on a pilot run in June 1984.

Before approaching the study's potential volunteers for the pilot run, two versions of the questionnaire had been consecutively presented and modified following an intensive discussion on their items and categorization at the Department of Modern Languages in Aston University. It was, however, deemed more

practical and rewarding to try out the second version with a small group of students. Therefore, copies of the questionnaire were made and distributed among ten Arab students (6 of whom were Libyans) in the University who were mostly postgraduates from different disciplines including, for example, engineering and language studies. Some of the participants were asked to write only their comments on the questionnaire in the column provided, and others were asked to answer it without any remarks. Below are the important observations and suggestions advanced by the subjects of the pilot run:

- 1) It was suggested that the words 'every month' at the end of the question asking about the number of books read by the student should be changed into 'every three months' in order to obtain a more reasonable response (see section 4.2.2.1 below for further justification of this point).
- 2) New additions were to be included: the category 'going out with family' was proposed especially for the married or female students to be included in the list of spare time activities cited in the question enquiring about them. Two items on the use of the lending library were also suggested because this habit had not been emphasized in the second version of the questionnaire.
- 3) On the organizational aspect of the questionnaire's layout, it was suggested that: (a) boxes for ticking the desired answer should be made in line with their relevant categories; and (b) preference order by numbering and not by ticking should be used for the item that deals with the students' reading interests in order to know the student's most and

least choice (see also section 4.2.2.1 for other details on this point).

- 4) Rewording was suggested for items which tended to be ambiguous or difficult to answer perhaps because of their unfamiliar reading terminology (e.g. the rewording of "scanning" into "discovering specific information") or length and subcategorization. These items were two which asked about ways and problems of reading for academic purposes.
- 5) The use of Arabic was strongly recommended for answering the items in order to avoid difficulties of understanding such items and/or writing succinctly and correctly in English for categories such as (Other, please specify). The latter suggestion as well as the fact that the study's potential sample was linguistically homogeneous had prompted the investigator to resort to present the third revised edition of the questionnaire in Arabic instead of English as was originally envisaged (see this final edition of the questionnaire in its Arabic and English versions in Appendices Nos. 3a and 3b respectively).

4.2.2.1 Reading Habits

The answers of respondents to questions about their usual (habitual) reading of periodicals (newspapers and magazines), books, and other relevant activities (e.g. TV viewing) are considered the measures of reading habits. The word 'reading' in those questions is meant to indicate, following Douglas (1976) and Oppenheim (1966), 'the breadth of reading experience' (the amount of reading done and of time spent in reading) and not necessarily

'the depth of it'. Thus, the word 'reading' used in the study's questionnaire is synonymous with 'looking at' or 'seeing'. Oppenheim, for instance, suggests that a question-word like 'read' must be well defined according to 'what we are trying to find out' and not to its meaning in dictionary terms (ibid., p.52-53).

The study's questions eliciting information about periodicals and books are based on the experiences of Heather (1981), Sikiotis (1980), and Greeney (1969). Their techniques of obtaining data about such reading material involve asking questions about the informants' frequency of use and their choices.

To get frequency information about periodicals, two questions, each of which had an adapted seven-point time scale from 'Never' to 'All weekdays' were asked. The validity of the time scale (as compared with other frequency scales i.e., abstract, verbal, and numeral) is supported by Corlett and Osborne (1966), who observe that the time scale's ability to achieve highly accurate responses is due to 'its use of terms which come naturally to respondents in their description of their reading habits' (p.7). Both authors also suggest that this scale should consist of 'a further position...between "once or twice a week" and "rarely or never"' in order to have "fair promise" (ibid.). This latter point was broadly corroborated by Tennstadt and Noelle-Newmann (1979) who concluded that 'the larger the number of categories [used in questionnaire items about periodicals' readership] the higher...figures found' (p.257).

To obtain information on choices of periodicals, two techniques of a checklist and an open-response question, often used in the literature to measure reading preferences, have been

adopted and combined here in a shortened form, following Helen Smith (1976), to find out what 'actual' periodicals were frequently 'looked at' or 'seen'; and to minimize informants' tendency to exaggerate when naming 'other' publications for open-response items eliciting such information. Two questions were asked, one about Libyan newspapers, one about non-Libyan Arabic magazines, to obtain data about choices. In addition to providing actual information, both questions were included about these publications because they are the most widely circulated publications in Libya (at least in the major cities, e.g., Tripoli and Benghazi), and because they denote what might generally be termed as different content orientations. The newspapers named in the questionnaire can indicate tendencies towards reading about 'news or current events' (e.g., al-Fajer al-Jadid), 'Libyan revolutionary ideology' (e.g., al-Zahf al-Akhdar, il-Jamahiriya), and 'entertainment' (e.g., al-Reyada il-Jamahiriya, a sport biweekly). The magazines included, however, can be divided according to 'current events/educational' (e.g., Kul Al-Arab), and 'entertainment' (e.g., al-Nahda, Nadeen). Thus, the inclusion of such publications should reveal important variations among respondents.

Obtaining information about book reading behaviour seems to require a treatment somewhat different from that for periodicals. This was suggested in the literature (e.g., Douglas, 1976) because books are difficult to list in a questionnaire (they are too many in number) and take a longer time to read and finish than periodicals. Thus, it is plausible to ask in a questionnaire about the number and types of books read and about their monthly and

hourly frequencies. To follow such guidelines, the investigator adapted the techniques used by Sikiotis (1980), Heather (1981), and Greeney (1969).

The technique for eliciting data about book types used in this study is one adapted from Sikiotis. In one item, Sikiotis instructs his questionnaire respondents to choose only 3 types from 14 kinds of books provided in a checklist form and to write the numbers 1, 2, 3 next to them according to the respondent's preference. He also suggests that the information collected by this item can be statistically analysed by two methods for comparison: 1) simply adding together 1st, 2nd, and 3rd choices; and 2) assigning different weights (points) to choices (especially when respondents are asked to give their order of preference): 1st choices are given 3 points, 2nd choices two points, and 3rd choices one point. Another technique for obtaining data about book types is, for example, the one used by Heather (1981) which involves asking informants open-ended questions such as what kind of books they like best; and whether they read any fiction or non-fiction books. This technique was not adopted here because it is more suited to interviews that allow chances for probing by the interviewer, and because open-ended questions can yield data that are more concerned with the 'depth' of students' reading than with the 'breadth' of reading (see Strang 1946, quoted in Helen Smith, 1976)). Furthermore, Heather suggests that this technique may give a long list of different types of books within the categories of fiction and non-fiction whose analysis requires the development of more categories that 'can never be completely consistent' and can involve 'subjective judgement'. To minimize such a problem ,

Heather advises that the categories should 'be kept simple' which in turn should require 'a minimum subjective judgement in the classification' (p.88). The adapted version of Sikiotis' item on book types used in this study had eight major kinds of books and one 'free-response' category that should discriminate between the main student categories in the sample; and it had the same instructions as those given by Sikiotis.

For information on book reading frequency, two different techniques were adopted with slight modifications: one was by Sikiotis, the other by Heather. The first technique asks students to show how many books for pleasure, on average, they read every month by selecting one choice from a 4-point scale indicating the number of books reported read. It was decided, however, that the period 'every month' in Sikiotis' item should be modified into 'every three months' because the period 'every month' seems to presuppose regularity in book reading (which may be appropriate for Sikiotis' sample of 12-17 year olds but not for our sample of 17-25 year olds), while the period 'every three months' allows for the intermittent nature of this habit and the age constraint of our sample (Bamberger, 1975 reports that the trend proven by research in different countries is that "general interest in reading falls off with advancing years, approximately 16 years of age" [p.23]). Furthermore, the investigator devised a follow-up item of a 5-point scale to elicit the reasons of those selecting the 'None' category (reluctant readers). The reasons given as choices were included on the basis of literature findings (e.g., Chambers, 1969; Price, 1980).

The second technique asks students to show how much time they spent reading books each week by selecting a choice from a 6-point scale indicating the hours spent in reading books from 'Do not read books' to 'More than 8 hours'. Heather resorted to this approach instead of the foregoing one because her sample of 13-15 year olds 'found it difficult to estimate how many books they read in a month' (p.21). It was decided that for this item to be used here it should be modified mainly to facilitate cross-tabulation with other activities based on the frequency time scale included in the questionnaire (e.g. TV viewing) and to conform again with the sample's age constraint. Thus, instead of having a combination of a verbal and time scale, the item in question was constructed according to a 7-point time scale ranging from 'zero hour/None' to 'More than 6 hours'.

The measurement of reading habits appears to be incomplete without considering activities such as television viewing, homework, and a host of free time hobbies and practices. Heather (1981) observes that the amount of reading done by learners "must be seen in relation to all the other activities" competing for these learners' time (p.48). In line with this suggestion, it was decided to include three questions, each of which measures such activities based on a 7-point time scale almost similar to the one used for book and periodicals' reading. The item on homework was also added to throw some light on the other major aspect of student's reading environment: academic reading (discussed later in this section).

4.2.2.2 Reading Attitudes

The use of reading frequency time scales in the study's questionnaire serves, according to Douglas (1976), a dual purpose: 1) to reveal the 'actual' time students spent on the reading material; and 2) to reveal indirectly the students' attitudes towards reading. Douglas took this idea from other works that used indirect questioning for attitude measurement such as the ones conducted by Spolsky (1969), and Gardner and Lambert (1972). Spolsky, for example, used direct and indirect questionnaires to get information on certain attitudinal aspects of second language learning. He found that although both methods were "clearly related", the indirect one was 'more sensitive, its results less disguised by student inhibition' (p.276). Oller *et al.* (1977), who attempted a comparison between direct methods of attitude assessment (the Gardner-Lambert approach) and indirect method (used by Spolsky, 1969) also found that 'indirect measures of attitude produced more meaningful variance' (pp.20-22).

In the present study, attitudes towards reading were measured indirectly by asking questions about the amount of time that students spent on various print media (i.e., books, magazines and newspapers) weekly. For example, this following six-point-scale question was given: 'How often do you read a newspaper every week?'. Categories from 'Never' or 'Once a week' to 'All week-days' were offered to the students to choose from.

4.2.2.3 Reading Facilities

According to research (e.g., Greenberg, 1970; Lamme, 1976; Douglas, 1976; Heather 1981), perhaps the most common sources of

reading material used in questions about this aspect of reading have been 'friends', 'lending library', and 'bookshops'. Thus, it was decided to include these 'sources' or 'facilities' in a multiple-response item with a free-response category allowing respondents to mention those sources which are not covered explicitly in the question. Information obtained from this item may indicate to us the number of opportunities available to students to read for pleasure, and which source or sources have an influence on our students in awakening their reading interests. Furthermore, because of the importance given to this third major indicator of leisure reading (see, for example, Bamberger, 1975), three more items on the lending library, the difficulties associated with its use, and other places of study (including home, Faculty library, and empty classrooms) have been included here under leisure reading respectively.

4.2.2.4 Academic Reading

The second major area (subconcept) of the questionnaire was the academic reading of students: i.e., the kind of reading they say they do for learning and for credit (for tests or exams) at home and University. Measures on seven academic reading variables were obtained from the students. These variables were as follows:

- 1) The Reading Involved in Homework -- This was measured by a single dichotomy (a yes-no question) asking students whether they had to read texts when doing their homework assignments. The measure was included in the questionnaire to serve a dual purpose: a) to indicate if staff did or did not require and encourage reading outside the classroom; and b)

to serve as a follow-up item to the question on time frequency of homework activity mentioned earlier under leisure reading.

- 2) Requirement of Textual Resources -- This variable consisted of one major multiple-response item and six follow-up/filter questions. The former assessed which reading materials (i.e., lecturer's handouts, textbooks, or references) were often required for reading during the term. The latter assessed each of those textual resources as noted below:
- a) Information on lecturer's handouts was gained by two items, one asking students if they did or did not rely on handouts to pass their exams, the other asking students who answered 'yes' to indicate why they used handouts by selecting reasons from a 4-category list. This list consisted of these named reasons which were thought to be related to non-book/reluctant reading behaviour (see, for example, Price, 1980; Dudley-Evans and Swales, 1980): "outside reading is not required", "outside reading is difficult", "outside reading is time-consuming", and "I am used to memorization". The latter reason can also serve as an internal check on the reliability of answers to the item measuring variable 8 (use of memorization, discussed later in this section).
 - b) Information on textbooks was obtained by one item asking students to indicate whether their required textbooks were of the 'simplified' or 'original' kind. This item should distinguish between those using simple English and those using 'authentic' English.

- c) Information on references (general and specific) was assessed by two items: one on whether staff advised students on what to borrow or buy (see Mann, 1975), and one on the availability of books recommended by tutors (see Douglas, 1977).
- 3) Ways of Reading Texts -- This variable was estimated by a single multiple-response item which was reported by Oppenheim (1966) and adapted for this investigation. The students were asked to indicate how often they read a recommended book or article related to their special field. They were given four reading strategies to select from: "Reading from cover to cover", "Discovering specific information", "Reading main ideas", and "Selecting chapters for intensive reading". If a student uses more than one way (rate/strategy) of reading, he is considered to be an efficient reader (see Staiger, 1979; Nuttall, 1982).

As is the case with all the questionnaire or interview data, the information gained from this item might not be presupposed as 'reliable' or 'factual' unless it was supported by results elicited by other objective methods and techniques (e.g., observation, internal and cross-checking). The present study attempted such means to a certain extent so that the questionnaire schedule would not be too long for students to respond to or the students (and indeed their lecturers) would not be burdened with too many tasks to do for the research project. However, if we consider only the total answer of the whole sample to the item in question, for example, rather than the single answer of any member of the

sample, we might arrive at what the literature calls as 'patterns, tendencies, trends or directions' that might be of relevant use to our research.

Besides providing data on efficient and inefficient readers, this item can indicate inferentially the effect of teaching practice on reading: if students employ a variety of reading strategies it is possible their teacher assigns independent reading and gives e.g. chapter tests regularly, while if they employ one strategy, it is possible their teacher never does both (see Paris, Lipson, and Wixon, 1983).

- 4) Reasons for Reading -- The measure for this variable which was developed for this investigation consisted of a single multiple-response item of four choices and one free-response category. It is of interest to know the factors (or reasons) that influence students to read for learning in a foreign language (e.g., English, in our case) indicated directly by them. Therefore, subjects were given these reasons to select from or add to: voluntary reasons ("Interest in topic", "To find evidence for writing") and compulsory reasons reflecting the influence of the course tutor ("Tutor's requirement", "Tutor's recommendation").
- 5) Problems of Reading in English -- The students' specific difficulties with academic reading in English was assessed by a single multiple-response item of five categories: "None", "Much reading matter", "Difficulty of reading/understanding texts", "Follow-up references", "Other problem, please specify". The construction of this item was

influenced partly by insights emitted by researchers such as Mann (1975) and Wright (1982) who respectively indicated the problem of reading lists and how first-year students at British universities would cope with it as well as the problem of processing English passages by overseas students including those coming from the Middle East.

- 6) The Use of Dictionary -- Again, the multiple-response item type was employed to measure this variable: to elicit data on students' use of monolingual and/or bilingual dictionaries as well as other dictionaries (i.e., for languages other than English or Arabic). This item may help indicate if the use or non-use of a dictionary (as reported by students) had an effect on their cloze test scores, and if it was implicitly related to the tutor's influence. Bensoussan, Sim and Weiss's (1984) work on "The Effect of Dictionary Usage on EFL Test Performance" (perhaps the first of its kind relevant to FL situation) found no significant relation between these two variables (use of dictionary and reading comprehension scores based on multiple-choice questions). However, the same authors pointed out that proficient students would use the dictionary less than less proficient students because of their possession of a larger vocabulary. Their other finding was that bilingual dictionaries seemed to be favoured by less proficient students and used by them even more often than proficient students. However, Bejoint (1981) and Tomaszczyk (1979) found that "the vast majority of foreign language learners and speakers use dictionaries".

But, what were the kinds of dictionaries used? Bensoussan et al. (1984) reported that more than half of their sample (which included Arab students) preferred the use of bilingual dictionaries "when they were given the choice" at an EFL test. Mustapha et al. (1983) indicated that Saudi Arabian students at KAAU would use English-Arabic dictionary as their first means (among others, a peer or teacher) for getting the sense of unknown English words. The same authors also mentioned that even after learning how 'to guess meaning from context', such students would 'generally require some external confirmation [e.g., a bilingual dictionary] that their guess is correct' (p.56). Baxter (1980) who asked his Japanese students of English to give their reason for their preference of a bilingual dictionary cited the following answer: 'bilingual dictionaries were easier to use while monolingual ones had difficult definitions' (p.333). When it comes to buying or using a monolingual dictionary EFL students, on the whole, were reported to have chosen the dictionary according to their teacher's recommendations (see Yorkey, 1979, Scholfield, 1982, and Huang, 1985).

- 7) The Use of memorization — This variable was measured by a yes- no item adapted from Douglas (1977). It was intended to yield information about whether students learn by heart (rote) what they read. This phenomenon is a strategy commonly utilized by Libyan learners when studying, for example, for examinations. It is indeed a familiar habit used by other Arab learners (including undergraduates) as well (see for instance, Douglas, 1977; Dudley-Evans and Swales, 1980;

Sivell, 1980; Wagner and Lotfi, 1983). However, this device is heavily criticized by most of these studies and even by other works done by Muslim scholars. Summing up this criticism, Wagner and Lutfi (1983) have this to say:

Western scholars and their Muslim colleagues have condemned the reliance of traditional teachers on "rote" pedagogical techniques and have pointed to possible negative influences on children's cognitive abilities. Memory skills of the students are said to develop at the expense of logical and creative thinking...(p.116)

But, the same authors concluded that "little evidence has been gathered to support this assumption". In fact, Douglas (1977) found that good students tried to write all that they heard in lecture in order to commit to memory their facts and to select from this store the relevant information at exam time. This was suggested by Douglas to be hard work on their part which "not so good" students were not prepared to do. Sivell (1980) also suggested that the habit of memorization can be used by teachers in countries where this habit is old and persisting as a help to make students confident in writing assignments (let them write memorized material) and able to reuse language in new contexts (let them compare their memorized effort with their answers to more demanding questions).

4.2.2.5 Personal Background

Responses under this heading were generally meant to be used in stratifying the sample by their personal and home characteristics which include age, sex, accommodation, father's

reading in English and in Arabic, and linguistic ability, and in forming the 'background' construct in the conceptual model of the present study. The inclusion of each characteristic was expected to give data in the following areas of interest perhaps relevant to reading.

- 1) Age (which was measured by the age of the student at the time of the questionnaire) might indicate to us maturity levels affecting reading performance (see Douglas, 1976).
- 2) Sex was important to consider especially in the Libyan context where women, on the whole, are relatively still lagging behind men with respect to literacy estimates. According to UNESCO Statistical Yearbook (1985), out of the 33.1% (640.000 total illiterate population) illiterate and unschooled persons aged 15+ in Libya, 18.6% were men and 50% were women aged 25 and over. The percentage of girls in the total number of pupils enrolled in preprimary, first level (elementary), and second level (secondary) in 1982 was 48%, 47%, 41% respectively. This decreasing trend of girl enrolment after compulsory school levels (pre-primary and elementary) was the subject of comment by Monastiri (1982) in his report on Libyan schools. He has this as an explanation for the imposed girl drop-out

The obstacle here arises from families, for the father or brother will not allow daughters or sisters, by then young women, to continue their schooling beyond the required obligatory period... (P.321)

To this, Mead and George (1973) writing on "Women in Libya" add another speculative reason after reporting about the

same imposed girl drop-out: 'parents send daughters to school merely to learn the basic skills most valued on the marriage market' (p.20). As far as girl enrolment at the third level (at higher educational institutions) is concerned, Patai (1983) shows a different and better situation: out of 110 % increase of third level population from 1970 to 1977, there was 283 % increase of Libyan females compared with that of their male counterparts (93 %).

For the present study, this factor might show us some important differences between the sexes in relation to reading. For example, since Libyan females tend to be more home-bound than the Libyan males, i.e., do not leave home frequently or stay out late on their own, it was expected that domestic or accommodation factors (TV viewing, homework, housework; hostels or own home) might lead to different reading behaviours between the sexes.

- 3) Accommodation was measured by a dichotomous item: off/on campus. It was also expected to distinguish between good or poor scorers on cloze tests. Research on the factors limiting reading behaviour show that homes with several siblings and/or extended family structure and those made of small flats or located in a university hostel are likely to discourage reading because of either their crowdedness, noise, or limited space (Napoli, 1968; Douglas, 1977; Kotei, 1980).
- 4) Father's knowledge of reading was assessed by two dichotomies (of yes-no type) — one on his reading in English, one on his reading in Arabic. This variable is another home background

(environmental) variable to be considered in addition to the above mentioned variable "Accommodation" and part of the item on "Place of Study" cited earlier under "Leisure Reading" . Mother's knowledge in either language was excluded because of the higher rate of illiteracy among women aged 25+ alluded to above under the variable "Sex", and because direct or indirect asking about female members in a Libyan respondent's household are likely to be ignored by that respondent (see Attir's work 1979: 'Trends on Modernization' in the Libyan society). The latter reason may be due to the fact that data on mothers, daughters, sisters, and wives are generally considered by many Libyans a private affair and any attempt to tap these data would be interpreted as an undue intrusion on the part of the investigator.

- 5) Linguistic ability was measured by what language the students say they use for leisure reading. In a multiple-response item, students were given a choice of three languages (Arabic, English, and French) and a 'free-response' category entitled 'Other language'. This variable was included to see if knowing more than one foreign language was related to reading performance, and to indicate which particular language the student usually and predominantly employed for leisure reading.

4.3 SECTION TWO: THE READING TESTS

The aim of this section is to give a brief review of each theoretical construct upon which the cloze procedure is thought to

be based, of studies indicating the validity and reliability of various aspects of cloze methodology and of cloze as an integrative measure of reading comprehension as used in the present investigation. A short summary of the arguments against the latter aspect of cloze are finally included.

But before proceeding to consider the brief review, some points must be made concerning the practical considerations upon which the investigator had also decided to choose the cloze procedure as an effective measure for testing the reading performance of this study's subjects. First, because the investigator was allowed a very limited time to complete the study's fieldwork in Libya , and because the experimental design required the testing of subjects who were from three faculties situated apart from each other and broadly from two distinct disciplines, the test selected for this study had to be the one that could be constructed easily.

According to Oller (1971) and Rye (1982), cloze tests can be made in a matter of minutes and their 'deletion of words helps to avoid the technical problems and bias associated with question construction'. Secondly, in addition to the foregoing factors, the performance of the study's fieldwork coincided with a period during which the students concerned were busy initially in preparing and doing their end-of-term examinations and later in attending the new term courses. Therefore, the chosen test had to be one which required little explanation and time to administer avoiding any disruptions to the timetables of both lecturers and students.

4.3.1 Rationale of Cloze Procedure

Cloze procedure has been defined as a testing method involving this overall sequential 'set of rules':

- a) A sample of continuous verbal discourse (written/oral 'message') is selected;
- b) The message's language patterns are mutilated by simply deleting words;
- c) Blanks are placed instead of the missing words;
- d) The mutilated 'message' is given to an examinee (reader/listener) who is asked to complete the language patterns by filling the gaps (inserting the words which seem most suitable in each blank space);
- e) The proportion of correctly-guessed words provided by the examinee is taken as an index of how much he has understood the message (Lunzer and Gardner, 1978; Foley, 1979; Harrison, 1981).

The literature on cloze procedure reports that it is theoretically based on or related to these four key concepts borrowed from different disciplines: 'closure', 'entropy', 'redundancy', and 'expectancy grammar'.

4.3.1.1 Cloze and Closure

Taylor (1953) who introduced cloze procedure, coined the term 'cloze' from the concept of 'closure' in the Gestalt psychology. The concept states that people tend to close mentally 'familiar but not-quite-finished' geometrical shapes in order to constitute wholes, e.g., an incomplete circle is 'seen' or recognised without any broken gaps. Taylor compared this tendency with the task of

making the mutilated text whole again. Critics of 'closure' or 'wholeness' rationale claim that it is 'weak', 'misleading', and lacks empirical evidence. They argue that filling gaps in a cloze test is not similar to 'seeing' a whole for an imperfect circle ; rather it is essentially a 'cognitive task' (Weaver, 1965; Foley, 1979; Rye, 1982). Rye briefly explains this point of view:

The reader has to reason and construct suggestions to fill the gap on the basis of the evidence from the context... the completion of meaning, based on understanding and reasoning is a cognitive task..
(P.3)

In 1970, Ohnmacht et al. published a study on 'Cloze and Closure' in which they concluded that cloze factors (4 cloze test passages of different deletion patterns) and perceptual closure factors (e.g., measures of flexibility and speed of closure) were moderately correlated. However, this finding was the subject of various interpretations: Rye (1982) used it as evidence against the rationale by reporting that the correlation was not 'strong'. Anderson (1976), on the other hand, used it as a positive support for the same rationale (i.e., relating the cloze procedure to the Gestalt notion of closure) by quoting exactly Ohnmacht et al.'s description of the finding, i.e., 'moderate', and by commenting on it as a reversal of Weaver's opinion about the lack of empirical evidence.

Oller (1979) finds the connection between 'closure' and 'cloze' acceptable provided that the cloze material is so familiar to the examinee (i.e., 'almost completely redundant') as in the following example offered by Oller: filling the deleted letters of

the words 'two', 'three', etc., in this sequence: 'One, t—, t—, f—, —ive, —x, —n, ...' (ibid., p.341).

4.3.1.2 Redundancy

From the bulk of research on cloze procedure, it seems that redundancy is rather a more popular construct for cloze to be associated with than 'closure' to the extent that some studies suggest the phrase 'redundancy utilization technique' as a new name for the procedure instead of 'cloze' (Weaver, 1965; Foley, 1979).

Redundancy is an important concept of the mathematical theory of Information (pioneered by Shannon and Weaver 1949) and a part of another key concept, 'entropy', adopted by Information Theory from Thermodynamics. Statistically, redundancy is a measure of the interdependence of the signals in a language: the occurrence of one signal influences the chances of the occurrence of another (e.g., in English, it is almost certain that the letter q is followed by the letter u except in rare cases like in Iraqi ; thus it is a measure of certainty or predictability. A succinct definition of redundancy in general terms is given by Cherry (1966):

A property of languages, codes, and sign systems which arises from a superfluity of rules, and which facilitates communication in spite of all the factors of uncertainty acting against it. (p.19)

The excess of rules pointed out by Cherry include spelling (see the example of this above), grammatical and semantic constraints that make a language (particularly a natural 'human' one)

redundant, i.e., repetitive and hence predictable and communicative despite interference (noise, unfinished sentences, etc.). The classic instance of redundancy is this one attributed to Charles Osgood by Taylor (1953, p.418) and Oller (1979, p.344):

'Man coming' means the same as 'A man is coming this way now'. The latter, which is more like ordinary English, is redundant; it indicates the singular number of the subject three times (by 'a', 'man', 'is'), the present tense twice ('is coming' and 'now'), and the direction of action twice ('coming' and 'this way'). Such repetitions of meaning, such internal ties between words, make it possible to replace 'is', 'this', 'way', or 'now', should any one be missed

Everyday examples of the use of redundancy can be manifested in the ability of individuals who know their language sufficiently well (have mastered its rules) to understand telegrams or letters of illegible handwriting in spite of the uncertainty that may result from omitting words in the former and the ambiguity of the latter.

In instances like the above, 'redundancy' is said to have been 'reduced' because of the interference in the communicating channel. Nevertheless, as hinted earlier, it apparently does not create serious communication breakdown for the linguistically-able native-speaker while it may do so for those who do not know the language well, particularly non-native speakers (Spolsky, 1971, 1973). The latter group would probably find a mutilated or incomplete message (exhibiting reduced redundancy) rather difficult to reconstruct (the more distortion it has, the more mistakes they make), and therefore they would need full normal redundancy or perhaps even more than that (in our L1, we may speak

to foreigners more slowly and perhaps use signs, gestures and repetitions as well).

From the above, we can see how 'redundancy utilization' is regarded as an important 'aptitude' in completing cloze tests (Weaver 1965). In a cloze test, the examinee is in a situation where the message is there but distorted and so its redundancy has been reduced. What is being assessed here is then his ability to restore the message (in other words, the message's intelligibility is tested) despite the added problem. According to Harrison (1981), his success in doing so depends upon two factors: 'the first is his redundancy utilization, i.e., his ability to use his awareness of linguistic conventions, vocabulary, and so on; the second is the information load of the message itself' (p.87). The latter is a characteristic of the message not of the examinee.

4.3.1.3 Expectancy Grammar

Another concept similar to redundancy referred to as 'expectancy grammar' has been proposed by Oller (1971, 1979), among others, to explain cloze procedure theoretically. Redundancy, as noted above, is a characteristic of natural languages (through the existence of graphic/auditory cues in verbal messages), 'expectancy grammar' is, on the other hand, a characteristic associated with the language user. According to Oller (1979, p.18), when reading a book, the reader processes its contents by partially 'expecting' or predicting 'more or less linear arrangement of verbal elements' (e.g., words, sentences, paragraphs, etc.) conveying information to occur. The more grammatically expected a verbal element is, the more readily it

can be processed as in cloze test (ibid.). For example, a sentence like the one produced by Chomsky illustrating semantic nonsense: 'colourless green ideas sleep furiously' can be very difficult to understand because it violates normal expectancies (it has little redundancy). Research about cloze has shown that scrambled passages (with unmeaningful rearranged sentences) used in cloze tests proved to be more difficult to complete than normal sequential cloze passages having the same sentences (see Chavez *et al.*, 1977; Rye, 1984). The ability to process by expectation is said to be determined by 'the person's control of the phonology of a language, his mastery of the syntax, semantics, rhetorical devices and his previous experience with the content' (Foley, 1984, p.76).

4.3.1.4 Entropy

Turning now to the concept of 'entropy', it is a construct first used in Thermodynamics to measure 'the unavailability of heat energy for transformation into useful work' (Rapoport, 1966, p.52). Heat energy which is employed for useful work, e.g., driving machinery, occurs when heat is made 'to flow from a source of higher temperature to another one of low temperature' (ibid.) (e.g., difference in temperature between boiler and cooler in a steam engine). When the temperature throughout a system is equalized (i.e., where there is no variation in temperature), entropy is observed to be at its highest level and none of the heat is available for work: the distribution of temperature in this instance is said to be most probable. Put differently,

entropy is the measure of the probability that the temperature in a system is distributed in a certain way.

The phenomenon of entropy may also be observed in other systems. Consider, for example, a pack of cards which is in a 'sorted' state: ordered e.g., from ace, deuce, etc., to king, if the cards are shuffled, their arrangement will most likely become disorderly (entropic). Now suppose you are asked to describe both card arrangements, which one would need more information to describe or summarize than the other? Most probably, greater descriptive information will be needed in the arbitrary random (shuffled) arrangement than in the other because you have to specify every one of the fifty-two cards. Entropy is therefore related to the amount of order in a system (the less order, the more entropy), and is equivalent to the amount of information required to describe a disorderly system (the less order, the more information) (Rapoport, 1966).

Using these information-theoretical principles in a language situation we say: in a reading passage, for example, the more highly structured (ordered) the passage, the less information needed to describe it. The relationship between entropy and cloze was investigated by Taylor (1954) and found that both 'appear to be strongly related'. Take, for instance, these two extreme examples given by Taylor to illustrate this connection: when all responses given at a particular blank are right, the value of cloze score (the ability to substitute missing items) would be 100% and the value of entropy (the amount of information needed to describe the text) would be zero. If different responses are chosen at any blank, the cloze score is zero and entropy would be

maximum. Between both extremes, there is, of course a variation; thus generally it is found that the lower the entropy, the higher the cloze scores (negative correlation) (Taylor 1954).

Entropy and redundancy are also related. According to Shannon (1949) entropy is a measure of the uncertainty and disorder of a system, redundancy is a measure of the same system's certainty or amount of order. Thus, they are opposite to one another: the higher the entropy, the lower the redundancy. Schramm (1966) provides a revealing example of this dichotomy:

Two cloze paragraphs A and B are presented to the same group of 20 readers. Suppose on the average they give these answers for each of the missing terms in either text: in paragraph A, 16 specify word A (correct) and the remaining four give other answers; while in paragraph B, 6 specify word A (correct) and 10 suggest different words. If this result is obtained, then 'paragraph B [has] considerably greater [uncertainty or relative entropy] for this audience than [has] paragraph A. Paragraph A is apparently more redundant than B' (p.525). Both concepts are therefore closely related to the readability of texts. The fact that paragraph A in the above example is more redundant than B is an indication that the former text most likely contains less amount of new information for this group of examinees; and is thus easier to understand than the latter one with greater entropy (having higher information load). The variation of difficulty between texts is related to its content, e.g., a poem is more difficult to read than a short story (Harrison, 1981), and also to its readers (what is redundant for a professor of medicine might be entropic, i.e., might need a lot of description, for the student of

education . Accordingly, in a cloze test using the clozentropy technique for scoring, (see details about this below) its results must obtain its data from 'a valid sample of population, or the results interpreted in a narrow way' (Douglas, 1976, p.67).

4.3.2 Cloze Methodology used in the Study's Tests

4.3.2.1 7th Word Deletion

This pattern of deletion falls within the random (or pseudo-random) deletion (as opposed to rational deletion) which omits systematically every nth word (every 5th to 10th word) from a written or spoken passage. Most studies on cloze procedure have used this method. Oller (1979), for example, suggests that 'unless the purpose of the testing involves a need to assess student performance on some particular grammatical form, type of content or the like, an every nth deletion procedure will probably work best' (p.365). These other reasons are often given for the adequacy of the random deletion:

- 1) It is simple and objective (simply start estimating from a word near the beginning of the text and delete every nth word thereafter until 50 blanks are reached).
- 2) Cloze (and particularly the deletion beyond the 5th word) is most suitable for non-native speakers because it provides more context for them to work with (more context, more comprehension) (Oller, 1973; Douglas, 1976; Foley, 1979). Even for native speakers (of English), the method seems to be effective. Lunzer and Gardner (1979) quoting other studies on this point report that 'depending upon the nature

of the material, the deletion pattern which will produce the highest score may be every seventh, ninth or tenth word' (p.89) because they seem to have a better effect on motivation than 5th word deletion.

- 3) It minimizes dependency among blanks (Darnell, 1970 gave this reason for using 10th word deletion in his original study on "Clozentropy").

However, the debate on which specific rate of deletion within the 5 to 10 word range has an effect on the validity of the cloze is still far from conclusive as further research on the topic still requires experiments with 'different types of texts' and 'stringent control of group differences' (see Rye, 1985; Chavez-Oller et al., 1985). But what has generally been held as practically true by many studies on cloze is the fact that when less than five words of context is provided, this seems to have some effect on the predictability of a deletion (Alderson, 1983; Rye, 1982). Technically, deciding on a specific rate within the 5th to 10th word deletion is restricted by 'the length of the selected text' (Oller, 1979, p.365). The length of each text involved in this study was approximately 350 words, thus every seventh word deletion ratio was proposed because it produces 50 blanks (which is the standard length of the cloze test). Examples of studies on cloze using the 7th word deletion and whose subjects are non-native speakers of English include Oller and Conrad (1971), Irvine et al. (1974), Douglas (1977), Gefen (1978), Hinofotis (1980), Flahive (1980), Murakami (1980), and Heilenman (1983).

4.3.2.2 'Structural' Deletion

We have already specified the rate of deletion for the study's tests. Now we report another aspect of this deletion, that is, the type of word it systematically omitted from the cloze passages. The study used what Rankin (1957) termed as 'structural' deletion: where any word (nth word) in the text is a potential deletion. This is the converse of Rankin's other type of deletion, i.e., 'lexical deletion' which omits every nth noun, verb, or some related category (adjectives and adverbs) from the text. Studies employing 'structural' deletion (e.g., Douglas, 1976; Anderson, 1976; Gefen, 1978) justify it by the fact that it is simple to use and often by Taylor's (1954) defence which states

To restrict deletions to particular kinds of words is to ignore the fact that those kinds may not occur equally often in different materials. That difference in frequency of occurrence may itself be a readability factor...(p.25)

Rankin (1957) found that 'structural' deletion was more related to both intelligence and pre-reading knowledge than was 'lexical' deletion (the present study's tests were pre-cloze tests which were taken without previously having read the passages). Commenting on Rankin's finding as a logical evidence for the 'structural' deletion, Robinson (1981) suggests 'when we assess reading ability we do not ask our readers to ignore their intelligence or past experience. We ask for the application of all their knowledge in what is a problem-solving task' (p.130).

4.3.2.3 Scoring by Clozentropy

The study's tests were scored by the binary scoring system devised by Douglas (1976). It follows Darnell's clozentropy

scoring procedure but it reduces considerably much of its complexity by introducing a much simpler way of computing the students' cloze scores. Darnell's method is a combination of a very simple data collection instrument (cloze procedure) and a rather complex scoring method (entropy measure derived from Information Theory). It was introduced by Darnell in 1968 as a viable scoring method for non-native speakers of English and an alternative to the other most common scoring techniques: exact-word method and acceptable-word method. Although the former technique (often called "exact-cloze") has been noted for its ease and objectivity (using the writer's very words as a criterion for marking), it 'fosters a static view of reading comprehension in which there is only correct text interpretation' (Henk and Selders 1984, p.283). Thus, Oller (1979, pp.367-368)) finds it to be 'too stringent a requirement [for the creative reader]' as a whole, and too difficult for the non-native speaker particularly. The latter method (often called "acceptable-cloze") was compared with the exact-cloze method by Oller (1972) in an extensive study involving 398 non-native speakers as subjects, and was found to be 'significantly superior' to the exact-cloze method because of its 'discriminatory power' (only 7 out of 150 cloze items failed to discriminate at $p < .05$ level) and validating correlations (correlated with all parts and total of UCLA ESL Placement Examination at $p < .001$, except the vocabulary subtest at $p < .05$) 'regardless of the level of difficulty of the test' (p.157). Porter (1978) , Hinofitis(1980), and Alderson (1983), for example, reached similar conclusions in their experimental studies.

However, critics of the acceptable-cloze say that it reduces reliability of the test because of subjective judgement (Lesiak and Bradley-Johnson 1983). Henk and Selders (1984) cite empirical evidence that shows that subjective judgement in acceptable-cloze occurs when scoring is done by one individual tester and not by inter-rater agreement. Foley (1979) reports that cloze studies of ESL/EFL subjects correlating both methods (e.g., Stubbs and Tucker, 1974; Hinofotis, 1976) indicate that there is little difference between the exact-cloze and acceptable-cloze in terms of their effect on cloze scores.

Darnell's method, 'clozentropy', is said to have combined the merits of both scoring methods: the objectivity of exact-cloze and the discriminatory power and validity of the acceptable-cloze. According to Darnell (1970), the foreign language examinee is assigned a weighted score for his responses to each cloze item on the basis of the frequency of occurrence of a given word suggested by a specified group (e.g., native-speakers) in response to a given cloze item in the same test. A higher score is assigned to answers given proportionately more frequently by native speakers. Each FL examinee's total score is arrived at by so lengthy and mathematically complex calculations that only computer assistance can do the scoring of a fairly large test group: each item in the test must undergo a computational procedure of four main steps in order to reach a weighted score for the item in question, then the weighted scores of all items in the test are summed up for each student to give his total score which indicates the extent to which his responses are unusual/compatible in the context of the native-speakers' responses. Darnell administered a cloze test

scored by his 'clozentropy' method to 48 foreign students, and found a reliability of .86 for the cloze test and a correlation of .83 with the Test of English as a Foreign Language (TOEFL) (a standardized proficiency test for admitting foreign students in American universities).

Reilly (1971) suggested a much less complex system of scoring by clozentropy: it minimizes considerably the number of Darnell's formulae by only a single formula that requires a two-step computation for obtaining the total scores of each FL examinee. In step 1 the tester computes the frequency of examinees in the criterion group choosing each response for each blank; and in step 2 he obtains the total score of each FL examinee by using the single formula: $T = \sum_k \log_{10} N_k$ where T is the total score for each examinee and N the weights associated with each response obtained in step 1. Reilly's system transforms the weighted scores to a common logarithmic scale: it avoids the use of seemingly unreasonable weights based on raw frequencies and in so doing it clarifies (according to Reilly) the distinction between the majority and minority of subjects choosing a particular answer for each blank. Reilly's system retains the main principle of Darnell's method: 'scores are still referenced against a criterion group with higher weights given for more compatible (i.e., more frequently occurring) responses' (Reilly, 1971, p.351).

Although Reilly's system appears to offer theoretically a relatively simpler way of computing Darnell's method, it was not mentioned by any of the fairly recent reviews on cloze (e.g., Oller, 1979; Robinson, 1981), nor was it used in earnest by

Douglas (1976) in his Botswana study which had clozentropy tests. In the latter study, Douglas reported that Reilly's system correlated strongly with his modified version of it : 'a binary scoring system' (.97 at $p < .01$) which he used for scoring his study's tests. Douglas would assign one point (a correct score) to every answer given by a non-native examinee (given for each cloze item) which coincides with that given by at least two native speakers (and not just by the majority of the criterion group according to Reilly's system). A zero score would be given to every response given by less than two native speakers. Although this may appear to be 'unfair' for the single creative respondent who may come up with an acceptable but less 'popular' replacement, the clozentropy method used in the present study, albeit not necessarily perfect, had to be followed according to its rules. This was done in order to avoid subjectivity and reach as much as possible a scoring compromise between the exact-cloze and the acceptable-cloze. From the pattern of responses of this study's criterion group to each blank given in both English reading tests, it was found that, on the whole, the majority of responses corresponded to the exact word of the writer of the test passage, and that a few single respondents offered words contextually acceptable.

Apart from the modification to Reilly's system and indeed to Darnell's method, Douglas's system follows exactly the clozentropy procedure devised by Darnell. Douglas first gave cloze tests to 100 native speakers of English whose answers were then used as a criterion against which he assessed answers of 441 bilingual pupils from Botswana to the same tests. According to Douglas, the

binary scoring system has two merits enhanced by the use of logarithms: 1) it retains the system's essential feature, i.e., the agreement of at least two members of the criterion group 'on the validity of a response' (log of at least 2 is .301, the log of 1 is zero); 2) 'it speeds scoring immensely'. In his Botswana study, Douglas found that scoring the cloze tests by his system was done so quickly (using a portable electronic calculator) that 'the results of each day's testing were usually ready on the same day' of test administration (despite his fairly large sample scattered in 9 schools).

In another study done in the Sudan in 1977, Douglas experimented with the binary scoring system to see if it could solve the problem of scoring a written Arabic cloze test. The test was first marked by exact-cloze and produced 'extremely and uniformly low' scores (p.60). According to Douglas, the reasons for these results were difficult to know (there was no other data to compare with at the time) but speculatively they might be due to the fact that 'the numbers of suitable alternative answers for an Arabic cloze item is high, and therefore the probability of selecting the one deleted is lower than in English' (p.61). Habib-Allah (1980) who did two studies, each of which used an Arabic cloze test scored by the acceptable-cloze confirms Douglas's reasons. The latter's use of the binary method to score his Arabic cloze test proved to be satisfactory as it yielded much higher scores and 'acceptably higher reliability coefficients' (p.55) than those made by the exact-word method (e.g., science students scored an exact-cloze mean of 19.6 but scored an entropy mean of 40.2; each mean was out of 50).

In the present study, therefore, the English tests and Arabic test were scored by clozentropy based on Douglas's system. The English tests were each devised by the researcher while the Arabic one was entirely Douglas's work (it was the test used in his Sudanese study) selected for this investigation because it had been tested already and proved valid and reliable. The English tests were administered to a group of 32 native speakers of English to make a criterion group against which the responses of the Libyan undergraduates (N=125) were to be assessed. (See section 5.1 for further information about the criterion group).

4.3.2.4 The Readability of Cloze Passages

This aspect of methodology deals with the difficulty level of passages used in cloze tests. Research into this topic (with non-native speakers in mind) generally indicates that 'the level of difficulty of the task [cloze test] does not greatly affect the spread of scores that will be produced [for some purposes such as testing ESL proficiency of university level foreign students] (see e.g., Oller's, 1979, review on cloze procedure, p.364). However, the levels of difficulty do obviously vary, and therefore the selection of materials for a cloze task needs to 'conform to certain variables' to ensure the reliability and validity of the task. According to Oller, the purpose for which the task or test is made (e.g., readability or overall language proficiency) decides the method of selection. In the latter purpose, for instance, the text to be chosen should be that which is appropriate for the grade level of the examinees for whom the task/test is intended. Rye (1982) offers a similar guideline and

adds a motivational aspect to it when the objective is testing reading ability by cloze: the passage selected for cloze test must be the one that subjects 'would want to and could reasonably be expected to read'. Put differently, the cloze text may either be of particular relevance to the students being tested, e.g., a history passage for students in humanities, or it may be a passage of general interest' (see Cohen 1980, P.92).

The present study used three different written passages. Two were English extracts selected randomly from two textbooks: one was entitled 'Tissues' from Hickman et al.'s (1984) Integrated Principles of Zoology prescribed for both medicine and veterinary medicine preliminary-year students, the other was entitled 'Self-Protection' from John Roland's (1978) Reading Comprehension Passages--Book 4 for the first year English specialists. This selection conforms with the above guidelines which call for relevance and expected readability (for each major sub-sample in the study) and is meant to yield data on the academic reading of such students. Both texts were assessed by the Flesch Formula (Flesch, 1948) and they had a reading ease score of 43 -- "fairly difficult", and 75 -- "fairly easy" respectively. The difference between these texts in terms of level of difficulty perhaps reflects the difference between them in style and genre (i.e., scientific expository vs. literary narrative prose respectively). If we also consider the reasons referred to above upon which the text selection was based, we may find the difference in readability between both passages as by no means inevitable. However, it is possible that the above reading ease score of .43 for the scientific text was nearly comparable in

readability level to that (.75) assigned to the narrative text because the scientific text was also prescribed for relevant readers familiar with the subject area of the text in question. This reader factor was not taken into account by the readability formula. The Flesch formula, like most readability formulae, bases its estimates, which are approximate and predictive, generally on word frequency and sentence length (see, e.g., Harrison, 1980; Chall, 1984). To comply with other guidelines for a valid and reliable cloze test, each English text was typed on stencil in double-spaced format and had a standard length of 50 deleted items. In both texts, each blank had a standard line of 12 typed spaces numbered serially. Also, a short lead-in and lead-out (2 sentences at the beginning and 2-3 sentences at the end) was provided in each passage 'to give sufficient context' (Foley, 1983, p.66; see also Oller, 1979).

The third passage was of the general literary interest type used in the Arabic cloze test for all three faculty groups. It was taken from the 'introduction to a book of poetry by Abu Al Gassim Al-Shabbi, describing the radical intellectual and artistic temperament of the poet'. According to Douglas (1977), who used this passage as an Arabic cloze test, the passage's language 'is modern literary Arabic, and is intended to represent the sort of general Arabic reading a university-level student might do, regardless of faculty' (p.51). Douglas also reports that despite the passage's bias towards the Humanities students, 'this had little effect' on the results of his Sudanese study. (Copies of each cloze passage, with the scoring sheets are found in the Appendices Nos. 1a - 1f, and 2a - 2b).

4.3.3 Cloze Procedure as a Measure of Reading Comprehension

Since the purpose of the cloze tests used in this study was to measure the reading comprehension of non-native speakers of English (who were native speakers of Arabic), the studies described in some detail in this section are those related to that purpose and use of the procedure.

Research investigating directly or indirectly the use of cloze procedure as a measure of reading comprehension (see, e.g., Anderson, 1976; Rye, 1985) seems to approach it broadly from three angles. The first one involves the use of correlation and factor analysis to establish concurrent or predictive validity of the procedure with other traditional comprehension tests, especially of the multiple choice type, and to identify the main underlying abilities required when doing the cloze tests respectively. The second angle involves the use of a measure called 'information gain' to assess the amount of new information a cloze testee obtains from studying a given text. The third approach includes varying specific aspects of the procedure, i.e., varying the deletion rates (e.g., 1 in 5 or 1 in 7) and modifying the sentence order (using natural vs. scrambled passages), to determine the procedure's sensitivity to intersentential constraint.

Many correlational studies in the L1 setting (carried out with subjects for whom English was a first language) have reported consistently substantial correlations between scores on cloze tests and those on standardized reading tests or specific reading comprehension tests. Anderson (1976) reviews briefly thirteen of the above studies (dealing with general reading comprehension)

whose subjects came from different school levels (primary, secondary, and tertiary), and whose cloze tests were of different deletion rates, reading material, and test administrations. The highest validity coefficients of such studies ranged from .68 to .84, while their reliability coefficients ranged from .88 to .97.

In the L2 setting (where the subjects were non-native speakers of English), research studies have similarly yielded significant correlations between scores on the cloze tests and scores on the standardized second language proficiency tests. These were integrative tests (as opposed to discrete-point tests) which focus on the students' ability to use language in real-life situations and had several underlying skills, e.g., listening comprehension, reading comprehension, speaking ability, etc., (see Oller 1979; Farhady 1982). Reference has already been made to the findings of Darnell's (1968) and Oller's (1972) research which substantiated the validity of cloze procedure as an integrative measure of second-language proficiency. Other significant findings related to this matter were reported by later studies. For example, Irvine *et al.* (1974) validated their cloze test of reading comprehension (given to 59 Persian-speaking students) with TOEFL, finding a correlation of .79. Stubbs and Tucker (1974) used the EEE (the English Entrance Examination of the American University in Beirut) for its 155 Arabic speaking subjects to correlate with their cloze tests. Their study's highest correlations were ($r=.76$, $p<.01$) between acceptable-cloze and total-EEE scores and ($r=.70$, $p<.01$) between the same cloze and the reading subtest of the EEE. Hinofotis (1980) also used TOEFL and the placement examination applied at the Centre for English as a

Second Language at Southern Illinois University to correlate with his cloze tests, and found significant correlations similar to the ones attained by Oller and others. Research done with bilingual children has equally added more evidence to the above findings, e.g., the work of Lapkin and Swain (1977). These investigators used the English language-related subtests of the Canadian Tests of Basic Skills (including reading comprehension) and two measures of French language achievement (Test de Rendement en Francais; Test de Lecture, 5e) as a validation for two cloze tests in English and French respectively. The study's highest correlations were at .68 between English cloze and CTBS and .65 between French cloze and Test de Lecture, 5e.

Studies which have examined the validity of the cloze procedure as a measure of specific reading comprehension correlated cloze tests with comprehension tests made by the same testers often over the same passages as the cloze tests, and showed almost comparable results. The earliest example often quoted by current researchers was Taylor's (1957) work which reported a correlation of .70 between a pre-cloze test and a comprehension test of the multiple choice variety and a correlation of .80 between a comprehension test and a post-cloze test. In a fairly recent cross-cultural study, Grundin *et al.* (1981) using a large sample of schoolchildren obtained a corrected correlation coefficient ranging from .59 to .65 between cloze tests and tests of 'global reading comprehension' (testees had to answer one global question: 'What is the main idea of the passage' after reading the same unmutilated text). The authors concluded from these results that 'the global task and cloze task tap to

some extent the same kind of reading ability - or at least some ability to "process written language". Correlations of a relatively higher magnitude (ranging from .65 to .73) were reached at secondary school and preliminary-year university levels in a second-language situation (Swaziland). They were between a long cloze test (of 80 random and rational deletions) assessed by the researcher (Wainman 1978) and a reading comprehension test assessed by experienced teachers.

Factor analytic studies on cloze seem to confirm the relationship between cloze and redundancy utilization. They have specifically identified the following factors as underlying cloze tests: (1) the ability to use the natural redundancy of language. This was described as the main underlying factor in cloze by Weaver and Kingston (1963); (2) closure factors of speed and flexibility in addition to a well-defined verbal factor with its usual markers of vocabulary and associational loadings (Ohnmacht *et al.*, 1970); (3) the factor of "general reading comprehension ability" (Bormuth, 1969); (4) the factor of "Evaluation of semantic Relations" interpreted as a measure of the subjects' ability to deal with the relationships among words and ideas (Horton, 1974); and (5) the syntactic, cohesive and strategic factors which refer respectively to predictive abilities of dealing with deletions depending on clause level context, intersentential cohesive context and on parallel patterns of coherence (Bachman 1982).

Turning now to the 'information gain' studies, it appears from reviews of cloze procedure (see Anderson 1976; Oller 1979) that most of research on this topic has been in the first language

(mainly English). In fact, Taylor's studies of (1956; 1957) have been frequently quoted as classic illustrations for such studies. His use of pre- and post-cloze tests allowed him to distinguish between the knowledge his subjects gained from reading a passage and the knowledge they had before reading the passage. Using adult subjects, Taylor reported 'learning gains' beyond the .001 level of confidence. Later research work tried to interpret an individual's cloze score as an indication of comprehension. Bormuth (1969), for example, was cited by Foley (1979) and Harrison (1980) to have found that subjects scoring 38% on cloze test had a noticeable increase in information gain scores. In another study, Bormuth (1967) reported that he had empirically equated the 38% criterion with the 75% criterion on the multiple-choice test.

A recent review on research (mainly done in L1 setting) looking into the construct validity of cloze tests as measures of intersentential comprehension reports 'a number of tentative suggestions' which may make cloze a sensitive measure to constraints across sentences: for example, cloze tests should have subjects experienced in working on cloze texts, passages of medial difficulty for the subjects concerned, and should allow examinees adequate time to fill in the missing words (see Rye, 1985). In the present study, the subjects were asked to complete an example cloze test (a practice test) prior to answering the main test in order to familiarize them with the procedure. They were also permitted to finish the test in 45 minutes plus 5 minutes for the practice test. This was the time already tried with the 4th year Libyan students at Al-Fateh University by the researcher and was

found to be sufficient. For the choice of a proper cloze text, this point was discussed earlier in section 4.3.2.4 in which purpose and relevance were reported to be the key criteria for adequacy.

Another review on the same issue but mostly on research made in L2 setting, has concluded that empirical evidence shows that 'at least some cloze items are sensitive to constraints beyond 5-10 words on either side of a blank and beyond sentence boundaries' (see Chavez-Oller *et al.*, 1985, p.182). Below are some examples of this positive evidence.

Oller (1975) wanted to see if increasing amounts of context increase the ease with which subjects supply missing words. He experimented with 93 native speakers of English and five different prose passages (four were cut in scrambled 'unmeaningful' order, and one in normal 'sequential' order) with different lengths of context. He found that longer contexts produced higher mean scores than did shorter segments of prose. Chihara *et al.* (1977) studied the sensitivity of cloze procedure to constraints ranging across sentence boundaries and the degree to which such constraints were available to 42 native speakers of English and 201 adult Japanese students of EFL. They too used sequential and scrambled cloze tests. Their results indicated that constraints across sentence boundaries help the performance of the language user 'on at least some cloze items' and that as the latter becomes 'more proficient' he also 'becomes increasingly competent in the use of discourse constraints' (pp.67-69). Cziko (1983) cites his study of 1978 in which the findings of Chihara *et al.* were replicated with sequential and random ordered French texts using 7th grade

students with near native proficiency in French and native speakers of French as subjects. His findings similarly indicated that 'at least sometimes' cloze items are sensitive to constraints ranging beyond 5-10 words of context. More recent evidence of the sensitivity of cloze to intersentential comprehension has been provided by Bachman (1982), Brown (1983), and Rye (1984).

4.3.4 Arguments against the Cloze

Despite the above evidence showing that cloze can be used as a measure of reading comprehension, some researchers have always doubted this claim. These critics argue that cloze tests are chiefly dependent on local redundancy (i.e. 'the extent to which linguistic cues in the immediate environment of a missing word tend to supply it') (e.g., Carroll 1972, p.18). Recent critics have confirmed the existence of this limitation of cloze and specifically pointed to the claim that cloze is capable of testing the low order skills relating to 'core proficiency' (sometimes called 'intermediate skills', e.g., the ability of handling collocation, anaphoric and cataphoric references, cohesive devices, etc.) rather than the higher order skills such as reorganisation, inference, and evaluation. These critics have also found empirically results refuting the effect of increasing context on the ease with which a gap will be clozed (see, for instance, Alderson, 1983; Porter 1983). The positive empirical evidence such as that produced by Oller (1975) and Chihara *et al.* (1977) (noted earlier) may offer an alternative convincing argument against this negative evidence and the local redundancy claim. Furthermore, Chavez-Oller *et al.* (1985) and Rye (1985) have

suggested that some studies reporting the negative evidence (namely that cloze is not a measure of intersentential comprehension) are fraught with theoretical and/or experimental weaknesses. Taking Alderson's and Porter's studies as examples, Chavez-Oller et al. list these weaknesses in such studies : (1) considering missing items in a scrambled text as cloze items; (2) use of incomparable different groups of samples; and (3) destroying context by cutting 'segments at random from distinct and unrelated textual sources' (p.188).

To the other similar claim of cloze measuring low order skills, Foley (1983) answers theoretically that the intermediate skills and high order skills do overlap considerably. He justifies this fact by referring to the consistent correlation between cloze and the multiple-choice type comprehension tests and by concluding that 'one cannot get at the ideas of the writer without having the basic language skills to decode the text'. As well, the present study's use of cloze procedure has shown that the technique has two particular features which benefited the research project: scoring (this yielded high reliabilities), and construction (this was easy and saved a lot of time).

4.4 SECTION THREE: THE STAFF INTERVIEWS

This section discusses how the staff interview schedule was constructed to obtain data on two major areas: (i) the lecturing staff's (who taught the undergraduates under investigation) own leisure and academic reading; (ii) the staff's use of student reading in the classroom and for homework. As noted earlier, these data constitute the fifth block of information within the study's experimental design and focus on a reading environmental factor which, among others, could be assumed to influence the students' reading performance (see Kohl, 1973; William, 1981; Nuttall, 1982 and Smithies, 1983). Furthermore, such data were meant to serve as a check against some of the answers to the student questionnaire and to be used as background information for the interpretation of the study's data on the relationships between the reading environmental factors reported by the students and the latter's reading performance.

The interview schedule contained 20 items which were grouped under four major headings cited in Section One (although the relevant items did not appear in this order on the interview schedule): (i) background; (ii) reading for academic purposes; (iii) reading for pleasure; and (iv) the use made of student reading in the classroom and for homework. Apart from the first heading which comprised 'classification' questions distinguishing subjects in the analysis, the group of items under the second and third headings were asked to elicit data on the staff's personal habits of academic and leisure reading, while those under the fourth heading were asked to gather information on classroom practices.

In the following paragraphs, a description is made of each group of items measuring the various components under each of the foregoing four headings.

4.4.1 Personal Background

As mentioned in Section One in this chapter under a similar heading, the personal background items were included to obtain data to classify the staff member according to the name of the faculty, the subject they taught and their name, nationality and gender. Following Mackay and Mountford (1978, p.23), asking about the lecturer's name and faculty was done 'in case we wished to return to him at some future date', and asking about the subject was to ensure that we interviewed lecturers from all subjects taught to our sample of students in the two faculties involved in the study (namely, Education, [English Department] and Veterinary-Medicine). The two items on gender and nationality were included to indicate to us the kind of balance actually existing among the staff members concerned on the basis of the categories of 'Libyan' / 'expatriate' and 'female' / 'male'. It was perhaps interesting to know whether the majority of English-medium lecturers were or were not non-native speakers of English to see if this had any effect on our students' English reading performance. Also interesting to know was which courses were predominantly taught by which category of staff in terms of nationality. Two other personal background items were asked enquiring about the staff members' length of service spent in his faculty and course. Each had a three-point time scale from 'Less

than one year' to 'More than three years' adapted from A Language for Life (The Bollock Report, 1975).

4.4.2 Reading for Academic Purposes

This is the first major area of the interview schedule which was meant to assess the lecturers' habits when they read for academic purposes. Four items were adapted from Mackay and Mountford (1978) and used here to measure these habits:

- 1) Reading for the Course -- The measure for this habit was a single dichotomy (a yes-no question) which Mackay and Mountford used in a published structured interview conducted at the National Autonomous University of Mexico 'prior to designing a special purpose English language course in the Faculty of Veterinary Medicine' (p.22). In the present study, the lecturers were asked whether they found it necessary to read to prepare their classes in their respective subjects. This question sought to identify the readers and non-readers among the staff members. It could perhaps identify the innovators and traditionalists (who used old repetitive teaching material).
- 2) Types of Reading Materials Read -- This was measured by a multiple-response item of four categories: 'Course textbook', 'Professional journals', 'Specific library books' (books borrowed from the lending library on or off campus), and 'Other, please specify'. It was included to indicate the nature and amount of academic reading materials read by the lecturers.

- 3) Frequency of Academic Reading -- The item estimating this aspect of staff reading employed a reading frequency time scale expressed verbally (a variant of time scale reported by Corlett and Osborne, 1966). This item was inserted in the interview schedule between the preceding item on the types of materials read and the next item on the language used for academic reading in order to provide information about the reading frequency with which the lecturers used both the materials and language specified by them.
- 4) Languages Used for Reading -- On this variable, the lecturers were asked to show in what languages they read and were given three choices to select from: 'Arabic', 'English', and 'Other, please specify'. The item was a follow-up question to be answered by those who positively said they had to read to prepare their classes. It also elicited information on the usefulness of specific language(s) in extensive academic reading in Libya practised by the lecturers.

4.4.3 Reading for Pleasure

The second major area of the interview schedule was on the reading which the staff said they did for enjoyment in their own leisure time. The eight items by which this habitual aspect of reading was measured broadly attempted to gather data answering the following question: 'Is reading a leisure interest in addition to being an academic activity for our sample of lecturers?'

The items were developed to follow exactly a similar pattern of those items concerning leisure reading used in the students' questionnaire and were based on the arguments (cited here in

Section 4.2) stating their objectives and understanding their effectiveness as measures of leisure reading. Moreover, some of the information elicited by such items could be crosstabulated or checked directly one against the other to determine whether there was a substantial disagreement, on any point, between the two groups (the students and their lecturers). For example, scores elicited by the question on book sources, could be compared with those on this same aspect reported by students to see what roles played by any one of the sources in the staff and student reading for pleasure.

The eight items in question covered most of the important leisure reading habits cited in the student questionnaire which were as follows: (1) time spent on newspaper reading; (2) choices of newspapers; (3) time spent on magazine reading; (4) choices of magazines; (5) number of books read; (6) book sources; (7) time spent on book reading; (8) time spent on watching television.

4.4.4 Use of Reading in Classroom

Eight other items were asked under this third major area of the interview schedules to collect data about the staff classroom practice related specifically to the use of reading as perceived and reported by the lecturing staff themselves. Such items were included to see whether the reading habits drawn out by the items of the first and second sections of the interview were, in any way, reflected in the reported classroom practice of the same staff which in turn was assumed to affect students' performance. Given below are the items making up the dimension of the staff classroom reading practice and the methods of their construction.

- 1) Reading in the language classroom -- This variable was designed to find out how important reading was vis-a-vis the other language skills usually taught by the language instructor. It was assessed by a multiple-response item adapted from Mackay and Mountford (1978, p.33) and expressed as follows:

'By means of the numbers 1 (most) 2, 3, 4 (least) indicate the time the course devotes to each skill.
Listening
Speaking
Reading
Writing

- 2) Types of reading across the curriculum -- Information into this area concerned eight types across the curriculum which might apply in their lectures. These activities were: a) 'Following while the lecturer reads'; b) 'Reading instructions from board'; c) 'Reading instructions from textbook'; d) 'Reading instructions from worksheet'; e) 'Personal research in libraries from a variety of sources'; f) 'Class intensive reading of short passages'; g) 'Reading to improve reading skills'; and h) 'Other, please specify'. These categories were adapted partly from A Language for Life (the Bullock Report, 1975) and partly from Language Across the Curriculum (Marland, 1977). They were also comprised in the interview to compare them with similar observed categories mentioned in the Reading Behaviour Inventory (devised by Dolan *et al.*, 1979).
Because this topic dealt with a list of reading activities (a set of items) and the respondent was asked to indicate which of these apply to him 'a lot', 'a certain amount', 'not very much'

or 'not at all', it was decided to use the inventory technique (an elaboration of the 'closed' type of question) which would yield quick information without having to ask many questions (see Oppenheim, 1966). The instruction for this inventory indicated that it should be answered by the staff members to whom reading was a relevant task. To score the inventory, a four-point scale was adopted (using the arbitrary scores: 4-3-2-1) where point 1 meant the non-use of the activity, and point 4 its frequent use.

4.4.5 Reading for Homework

In this area, the relevant information comprised the use or non-use of assigned reading in homework, reasons, if any, for lack of assigned reading, the types of textual material required for reading as part of homework and preparation for examinations. As mentioned in The Effective Use of Reading (Lunzer and Gardner, 1979), reading here was defined as 'looking at written or printed words' in order to cover the reading done as a part of the homework task in both English and Medicine streams. The specific questions assessing homework reading were developed as follows:

- 1) Reading involved in homework -- This variable was measured by a dichotomous item (yes-no question) to replicate (and indeed to validate) the information which would also be gained from an exactly similar question addressed to the students in their questionnaire schedule (see section 4.2).
- 2) Reasons for lack of reading in homework -- This aspect was assessed by a follow-up item (to the previous one above) of multiple-response type which was developed by the investigator

using similar categories cited in two separate items (9 and 18) in the student questionnaire. The latter items enquired about the reasons for reluctant reading and reliance on reading worksheets respectively. Information into this matter could be cross-checked with similar data gathered by the foregoing items in the student questionnaire and used to probe further the reasons behind the 'no' answer that the previous item might elicit.

- 3) Textual sources assigned for reading -- To gauge the kinds of texts required as part of homework assignment, another follow-up question of multiple-response type was included based on a similar item (number 16) in the student questionnaire. The item asked the lecturing staff to check, where applicable, texts such as 'worksheets', 'textbooks', 'general references', and 'specific references'. Thus, the data of this item could be compared with those collected by item 16 in the student questionnaire and serve as a further amplification to the information given by the staff members who said 'yes' to item 1 above (item 3 in the interview).
- 4) Textual sources read for examinations -- This is another aspect of the above topic assessed by a multiple-response item asking about which of the categories in item 3 above (item 5 in the interview) could be considered indispensable for students to pass the course. The item was adapted from item 17 in the student questionnaire (asking about the student's dependence on handouts for passing his exams) and from a similar item reported by Mackay and Mountford (1978). Thus, besides eliciting information on the text used more predominantly than

others by students for reading for credit, this item could provide an internal checking for item 5 (cited above) in the interview and a cross-checking for item 17 in the student questionnaire (see Oppenheim, 1966).

4.4.6 Reading Assessment

Information in this area concerned such methods as 'formal testing', 'informal testing', 'discussions', and 'other' employed by the lecturer to find out whether his students did or did not understand what they were required to read. To measure this variable a multiple response item containing the above four methods was constructed based on insights from authors such as Smithies (1983) and Nuttall (1982).

4.4.7 Students' Level of Reading in English

This was the final topic in the staff interview which was assessed by a multiple-choice item asking the lecturer to check one category from among four choices indicating whether his students read English with fluency or a certain degree of difficulty (i.e., with little, some, or great difficulty). Mackay and Mountford (1978) used a similar question for their Mexico ESP staff interview. (A copy of the present study's staff interview appears in Appendix No.4).

4.5 SECTION FOUR: THE READING BEHAVIOUR INVENTORY

This section reports the purpose, reasons for choosing and very briefly the most important structure of the Reading Behaviour

Inventory (hereafter RBI) devised by Dolan, Harrison and Allman (1979) and slightly adapted for the present study.

The aim of RBI was to assess, through recording the actual activities of both lecturer and students, the likelihood of the existing classroom environment being appropriately instrumental in promoting effective reading across the curriculum. This information sought by RBI, therefore, falls under the study's reading environmental concept, 'classroom reading behaviour', referred to earlier in this chapter. Under this broad aim of RBI, the Inventory was expected specifically to highlight differences in the time spent by lecturer and students on various classroom activities between Arabic-medium and English-medium subject areas; and highlight differences in the pattern of continuity in reading between the subject areas under investigation.

RBI was chosen as an appropriate observational instrument for this study for the following reasons:

- 1) It had already been used in a large scale observational study about the incidence and context of reading in top junior and secondary school classes in England. The data of this English study were collected on over 100 teachers and 202 sessions whose reported length of time was 9990 minutes.
- 2) According to its authors, RBI established its inter-observer reliability by 'using a videotaped lesson' which was scored and then discussed and by 'a system of paired observations in which observers sat side by side and recorded the activities of a single [pupil] for comparison later' (Dolan *et al.*, 1979, pp. 111-112). Its rigorous piloting took over a six-month period

and included the seeking of advice from teachers and experts of classroom observation research.

- 3) It used a single-sheeted protocol meant to measure content classroom behaviour (i.e., it was not limited to specific subject area classroom characteristics) which in itself would achieve quick recording, uniformity of both data-collection procedures and focus, as well as relevance to the purpose of this thesis.
- 4) It used low-reference categories: 'specific local, overt behaviours required for real-time coding' which could be managed easily and simultaneously by the observer and were most importantly relevant to activities of both lecturer and preliminary-year student.

4.5.1 The Structure of RBI

The RBI adapted for this investigation was composed of a 'minute-by-minute time-sampled record of the incidence of specific classroom activities of [both lecturer and student]'. Hence, the RBI protocol was divided into two basic sections: one dealt with the lecturer-directed and initiated behaviour, the other with observed student's activities. The following list contains the main RBI categories for the lecturer's section as defined and exemplified by the authors of the Inventory:

- (a) Administrating (e.g., making register)
- (b) Writing (e.g., on chalkboard)
- (c) Reading (e.g., reading aloud or silently from a worksheet or textbook)
- (d) Discussing (e.g., 'engaging in a question-and-answer session with whole class or group')
- (e) Informing (e.g., talking to whole class)

(f) Individual tuition (e.g., non-public conversation)

Also given below is the list of the main RBI categories for the student's section as presented by the RBI's authors:

- (a) Administrating (e.g., getting books out)
- (b) Writing (e.g., directly from chalkboard)
- (c) Reading (e.g., 'fixating' a printed or written source)
- (d) Listening (e.g., to a lecturer or group speaking or reading)
- (e) Not involved (e.g., chatting about irrelevant matters with a classmate)

As hinted above, the method of recording these activities was based on minute-by-minute time-sampled observations. Dolan (1975) illustrated succinctly how this RBI's recording was performed for the amount of reading noted in any one minute

'[It] was to record estimates of the reading observed on a 1 to 4 scale. A recording of 1 signified a period of reading from 1 to 15 seconds; 2- between 15 and 30 seconds; 3- between 30 and 45 seconds; and 4- from 45 seconds to one minute...' (pp.154-155)

(A copy of the RBI's protocol adapted for this study is found in Appendix No.5).

4.6. SECTION FIVE: FIELDWORK IN LIBYA

4.6.1 Introduction

In the foregoing sections of this chapter, an attempt has been made to describe and justify the study's experimental design and discuss in detail the four methods chosen for collecting its data. This chapter reports the procedures by which the experimental design was actually materialized in the field: at the University of Al-Fateh in Tripoli, Libya.

As indicated earlier, the investigator sought to complete four missions in Libya:

- 1) To distribute a questionnaire to a sample of preliminary-year undergraduates to gather data on a number of variables indicative of their particular reading environment (as defined in this chapter), including textual resources read, time spent on reading, reading facilities, references and requirements, and certain personal background factors.
- 2) To administer three cloze tests two of which were in English and the third was in Arabic in order to assess the reading ability of such undergraduates in both English and Arabic and use their results for correlation with those of their questionnaire.
- 3) To interview the lecturers actually teaching the above students on variables related to their reading for pleasure and for academic purposes and use of reading in the classroom.
- 4) To observe and record, by means of an inventory (RBI), the activities of a relatively smaller number of preliminary-year

undergraduates (from two faculties: Education [English Department], and Veterinary Medicine) and also the activities of the above sample of lecturers during a sample of lecture sessions across the curriculum.

Of the 34 items of the questionnaire schedule already decided on the basis of a pilot test conducted in Britain (see section 4.2 here for a description), two questions (5 and 7) concerning the choices of periodicals were tentative in terms of their incomplete lists of titles, and required further piloting in Libya in order to include the titles of the recent and popular periodicals yielding significant variability in the students' responses to both questions. The formats of the staff interview and the Reading Behaviour Inventory (RBI), were also tentatively prepared based on the fact that the items and categories used in each one had already been tried in a major survey by its authors (see sections 4.4 and 4.5 here for details on this). To test their suitability for the study's sample and setting, both instruments were intended for short piloting in Libya before their administration.

The passage for the Arabic cloze test and its 'clozentropy' scoring sheet were equally decided upon based on the previous use of the test by its author (Douglas 1977) in an important research project in the Sudan. Not prepared, however, were the two English cloze tests designated for each sub-sample in the study because the selection of their passages had to be postponed until arrival in Libya. Each passage needed to reflect the type of the actual academic reading which the relevant sub-sample of subjects was required to do.

Thus, prior to leaving for Libya, the Arabic cloze test, including its practice test and scoring sheet, RBI protocol, interview schedule and all but two items in the questionnaire format were typed and duplicated. Also before departure, the investigator obtained the permission of his sponsor, the Faculty of Education at Al-Fateh University, to conduct the fieldwork. This permission had to be applied for within an ample time via two channels of communication, the Libyan People's Bureau in London and the Department of Students' Missions and Scholarships in the Libyan Secretariat (Ministry) of Education in Tripoli.

4.6.2 Preliminaries

Despite the seemingly long period (from 11 January to 25 March 1985) offered to the investigator to complete the research work in Libya, it was not practically possible to do the proper tasks in their entirety until 3 March (the beginning of the new academic term). This was due to the fact that in the intervening period, the undergraduates concerned, in the three faculties included in this study, were successively engaged in the serious business of examinations, having a term break, and busy in registering for the new term.

Therefore, time played a crucial role in shaping the course of procedural events pertaining to the conduct of fieldwork in Libya. On one hand, time provided the investigator with an opportunity (i) to inform the Secretaries of People's Committees (the Deans) and colleagues of the three faculties concerned of the project's future visits, (ii) to gather from several academic and public institutions and departments documentary background data

about education and literacy in Libya relevant to the theme of the study , and (iii) to carry out pilot tests of the unfinished and postponed instruments of the project (i.e., for items 5 and 7 in the questionnaire and the two English cloze tests). On the other hand, time allowed such a relatively short period for the implementation of the fieldwork that the procedures of one instrument (the RBI) had to be somewhat curtailed .

With respect to the intervening period, some points perhaps need further clarification. Informing the authorities and colleagues of the investigator's visits to their faculties or classrooms was not done by an official circular letter, as might be expected, but by person-to-person communication which produced quicker and more satisfactory results (e.g., the acquisition of register listings of students and class timetables, etc.). This measure was taken based upon the investigator's personal experience with such matters. For statistics on Libyan periodicals and book readership trends, help was received from the Public Establishment for Publishing, Advertising and Distributing which provided lists of periodicals including their distributors, sold and returned issues, as well as a report on the results of a readership survey conducted in 1984. Other statistics on education, literacy and cultural activity were obtained from the Department for Publishing, Printing and Libraries at Al-Fateh University which publishes guide books and some textbooks and periodicals; the Departments of Literacy & Adult Education and Planning and Follow-up in the Secretariat of Education, the Department of Culture & National Guidance in the Secretariat of Information, and the librarians of both Faculties of Education and

Veterinary Medicine. It was found that Al-Fateh University had not published its general prospectus for years and this gap had to be filled in by such publications as the 1980/81 prospectuses of both faculties cited above, the 1982-83 issues of al-Jame'ha ('The University'-- a news bulletin) and Alam Al-Ma' Alumat ('Information World'--a professional journal) published by the departments for Publishing, Printing & Libraries and of Library & Information Science at Al-Fateh University respectively.

During the interval also, three pilot tests were conducted. The first one concerned the two unfinished items (5 and 7) of the questionnaire schedule which were given to a group of 47 premedical students . Although these students were about to do a final practical examination in Chemistry, neither they nor their instructor objected to responding to the questionnaire which had been given to the students 15 minutes before the exam started. The purpose of this pilot test was to identify the popular periodicals read by university freshmen today. It was discovered that in addition to the titles cited in the schedule, four more Arabic language periodicals were reported as such: al-Reyada il-Jamhiriya (a Libyan sport biweekly), Kul Al-Arab, al-Nahda and Nadeen (magazines for current events, women, and entertainment respectively).

The second and third tests consisted of the already unadministered two English cloze passages, 'Tissues' and 'Self-Protection', which were tried out with 23 fourth year medical students and 32 fourth year English specialists respectively. The initial aim (following Douglas 1977) was to use their scores as criteria for marking the freshmen's results in the same tests and

see how the tests would work in terms of their instructions and procedures. It was found, for example, that the average time spent by the majority of examinees in each test was between 40 to 51 minutes, i.e., each could be completed within a one-hourly session at best.

4.6.3 Selection of the Sample

The sample here includes the students who participated in answering the items of the questionnaire and completing the English and Arabic cloze tests. They were all native speakers of Arabic and preliminary-year students who belonged to the three different Faculties of: Education (English Department), Veterinary Medicine, and Medicine at Al-Fateh University in Tripoli. According to the students' official register lists obtained from the relevant authority of each of the above faculties, the total number of the grand (target) population was (N=434) broken down as follows:

272	premedical population
86	first year English population
76	preveterinary-medicine population
<hr/>	
N=434	

However, when the above three main instruments were administered one after another it was found that the total number of participants in such instruments in terms of discipline (or which faculty they came from) was (N=312) analysed as follows:

162	premedical participants
86	first year English participants
64	preveterinary-medicine participants
<hr/>	
N=312	

Again, the latter figure was reduced to (N=125) to represent the total subjects (total accessible sample) of the study each of whom duly completed all the three research instruments cited above. Thus, the total sample excluded the students who did one or two instruments only. This reduction to the figure (N=125) was necessitated by factors which the investigator had faced during the implementation of the three instruments in question in Libya. The administration of more than one instrument to each group of students required two different sessions at least. This led perhaps to the inevitable fluctuation of participants' number as some students happened to be normally absent on the day or days of the tests, others would show up on one, two, or three testing occasions. Such fluctuation seemed to occur as a result of the relative difficulty of the course session chosen as a testing period (the more difficult the course was, the more attendance occurred), the timing of such a session (morning sessions used to secure more audience), and the number of repeaters available in each group (this type of students normally tended not to attend, regularly or at all, most lectures). Therefore, the total study sample (N=125) was selected on the basis of three criteria decided upon after all data had been collected. Besides having to respond to the three main research instruments altogether (referred to earlier), subjects must have written their names on all the three instruments and finished them completely .

During the conduct of the fieldwork proper the investigator attempted to minimize as much as possible any sampling bias that might occur in such circumstances by carrying out the following procedures:

- 1) No advance warning was given to the students, who were designated to do the tests or respond to the questionnaire, about the topic nor the time of any research event.
- 2) The majority of the population of each discipline involved in the study was used (i.e., as participants in the research).
- 3) The study's instruments were administered during normal lecture hours (see Wilson 1984, p.11). Only one case took place after exam time (see details about this below).
- 4) The sample was taken from three different locations, thus enabling results to be compared on a relatively wider scale (see Sudman 1976, p.26).
- 5) All the three sub-samples were of the same university level (i.e., preliminary-year students) using English as a medium of learning (and by implication as a medium of instruction for their professors), and had completed one academic term (one semester at the university).
- 6) Follow-up procedures were taken with those cases which were listed as absent during the questionnaire administration. For some cases, appointments had to be made in order to respond to the questionnaire in the presence of the investigator at a later date while for some others an arrangement was reached by which they would answer their questionnaires immediately after completing their cloze tests.

4.6.4 Administration of Instruments

4.6.4.1 Questionnaires

As early as 3 February 1985 the investigator was able to administer the questionnaire to 74 first year English specialists immediately after they had finished their end-of-term reading comprehension examination in the same exam auditorium. This was the only exceptional case where 85% of the population participated in one instrument and the second of its kind where the examiner (i.e., the subject area instructor) allowed the investigator to conduct his research work during exam time and the students concerned did not object to that procedure (the first was the pilot run of items 5 and 7 of the same questionnaire).

To the examinees, this procedure might have been treated as a relaxation following the tension usually generated by formal examinations, and to the examiner (as he had justified it to the investigator beforehand), it would not disrupt his timetable and would secure the participation of the majority of the first year English specialist population in just one attempt (i.e., one lecture session). Normally, these students were split into two groups in two different classrooms during term time.

However, this technique was not used with the other student sub-samples in the study nor was it adopted for the above population when doing their cloze tests, simply because there was no similar opportunity (e.g., end-of-term exam) for the investigator to utilize for research purposes. Thus, another procedure was followed which included the selection of a difficult core subject area with a one- or two-hourly lecture session available during the new term time and seeking the approval of its

instructor to use it for research purpose in an ample time before the actual administration of the instrument. This was to ensure the full and serious participation of as many students in a single group as possible from among the population for whom the content area was prescribed; and to be able to give two different instruments (particularly in two-hourly sessions) in one attempt. The latter was especially important to do because of the short time period permitted for the investigator to conduct his field project and to avoid causing further disruption of the cooperating colleague's timetable.

As a result of this procedure, of the total preveterinary and premedical student populations (N=76; N=272), 51 and 90 subjects completed the questionnaire respectively in their regular morning class periods and lecture rooms. As noted above, absenteeism and reluctance to answer the questionnaire items were responsible for the decrease in the number of participants in both disciplines. The majority of the prevets responded to their questionnaires on 11 March, 1985, while most of the premeds did theirs on 20 March.

In all cases, the questionnaires were administered by the investigator to ensure uniformity in the collection of data. The students were not allowed to answer the questions immediately but were asked to listen first to each question being read aloud and explained, when necessary. This was to make sure that the students understood the questionnaire items and answered adequately. Moreover, the presence of the investigator was advantageous in a number of instances. It secured a large number of responses; allowed both students and researcher to clarify to each other any

misconceptions or ambiguities arising from the questions; checked on and corrected some formal errors in all responses on the spot (e.g., checking the right box); and ensured that every respondent had completed his questionnaire without any influence of others (by asking students to sit reasonably apart from each other).

While supervising the answering of questions, the investigator noticed that one question (item 14, about the use of the lending library) required further probing because it was answered in the negative by almost half of the respondents. Therefore, it was decided to improvise a follow-up and open-ended question asking those non-users of the library to write in a few lines the reasons for their negative responses at the back of the questionnaire sheet where the question concerned was mentioned. Such a step generated, in fact, a lot of varied and interesting justifiable responses justifying the original response to the matter at issue.

Many amended copies of the questionnaire schedule had to be reproduced mainly by the stencil-copying machines and less frequently by the few electronic photocopying facilities accessible to the researcher in the Faculty of Education at Al-Fateh University. This bulk of amended questionnaires was required because of the unexpected and relatively large number of questionnaire respondents, particularly the premeds, and to the addition of the locally piloted and popular periodical titles (for items 5 and 7 cited earlier) in the questionnaire schedule.

4.6.4.2 Cloze Tests

Testing took place in three different locations: in the Faculties of Education, Medicine, and Veterinary Medicine. The latter was more than one mile away from the rest. In the Faculty of Education (English Department), the first year English specialists were tested in two classrooms. This was done because of the relatively large number of these students and shortage of space allocated for the English Department. However, the other sub-samples (the prevets and the premeds) were each tested as a single group in their own regular large lecture rooms in one session.

In view of the different number and kind of tests (three cloze tests, one in Arabic and two in English) and academic streams involved in the study (broadly, they were two: Medicine and English), various dates were set for testing according to prior arrangement with several colleagues in the three foregoing locations. The English cloze test for each major stream was assigned a different single date: the Medicine group took their test (hereafter 'Tissues') on 7 March, while the English group did theirs (hereafter 'Self-protection') on 21 March. The attempt to appoint similarly a single day for the Arabic test for all the groups only succeeded with two sub-samples of the study, the first English specialists and the prevets who both did the test simultaneously in their different locations on the early hours of the academic day, 18 March. It was not possible to include the third and relatively larger sub-sample, the premeds, along with the others because, according to this sub-sample's timetable for the new term, there was no two-hourly class period that could take

them all as a single group and in the meantime coincide with those periods used for testing the other groups on 18 March. Nor was it possible to get on the same above date two unused rooms in which the premeds could be tested concurrently as two groups. Therefore, the premeds did the Arabic test in the earliest lecture session set for 20 March.

Trying to assign a single day for testing was part of a set of steps adopted to maintain as strictly as possible the confidentiality required for the tests. The other steps were:

- 1) The no-advance warning referred to earlier under sampling and questionnaire administration;
- 2) Testees were not allowed to take away with them any unused or incomplete test sheets after finishing each test;
- 3) During testing, testees were properly seated as they would normally do in formal examinations.

The usual practice for conducting the tests was to explain initially to the testees the purpose of the test -- that it was for research only and its results would not affect in any way the students' course grades nor would such results or their names be used in purposes other than those of research or disclosed to any one else respectively; then to read aloud the test instructions and answer any questions concerning them; and finally to let the students do the short Example Test for about 5 minutes and the Main Test for about 45 minutes. Although this full time for the Main Test was allowed for the students, it was only required by them when they were working on the English tests. For the Main Arabic test, they needed slightly less full time to complete it:

between 35 to 40 minutes (Douglas, 1977 gave about 40 minutes to his Sudanese students to do the same test).

The foregoing standard procedure was followed throughout in spite of the different testing situations in terms of relative distance (of faculties under investigation), and availability of time (use of different dates for the same test, Arabic cloze test) and space (use of two rooms for a single test and student sub-sample, the English group). Help to maintain the consistency of procedure was deemed necessary due to such testing situations. Between one to two colleagues volunteered to assist in invigilating the test sessions either alone or with the investigator. In two cases, the investigator was not fully able to administer the tests all by himself. One was when the English sub-groups had to do the test 'Self-protection' in two separate rooms simultaneously which necessitated the use of one assistant to invigilate in one of them while the investigator would move from one room to another during the test session. The other was when the Arabic test had to be given in two distant locations (in the Faculties of Education and Veterinary Medicine) on the same day and time which required the full presence of the researcher in one place and the assistant in another.

The initial marking of the English passages was done after the end of testing in Libya based on the exact-word scoring method and the results of the 4th-year criterion groups referred to earlier. Despite its ease and speed, this marking yielded very low scores and very low reliability coefficients. Thus, the final and effective scoring of the same cloze passages had to be left until arrival in Britain in which the passages were then scored using

the 'clozentropy' method based on the results of a group of native speakers of English (see details on this in section 5.1). For the Arabic passage, the marking was done without delay according to the already prepared entropy scoring sheet made by Douglas 1977 (see also section 5.2 for the findings of this test).

In addition to the general construct and predictive validity of the cloze tests alluded to in Section Two above, the investigator attempted to establish the empirical validity of the tests used in this study by seeking the students' results of their final end-of-term examinations. But this proved to be difficult to get owing to the unavailability of the results during the investigator's stay in Tripoli and to their inaccessibility after his return to Birmingham (there was no reply to his correspondence with the academics concerned about such results). The students' broad level of reading in English was, however, obtained through interviewing their lecturers who reported that on average their students read English with some difficulty (see section 7.2.7).

The total examinees of English cloze tests was 211 while those of Arabic cloze test was 199 from the three faculties under investigation. Similar to what happened during the questionnaire administration, some of the missing students were absent, others left the test session from its outset without participation.

4.6.4.3 Staff Interviews

To make sure that the staff interview schedule was practically effective, it was piloted with a few lecturers in both Faculties of Education and Veterinary Medicine immediately after the beginning of the new term. It was found that some items had to

be dropped from or reworded in the schedule because of either their inappropriateness for our staff sample or limited coverage of the required information. For example both items asking the lecturer about how often he applies 'individual reading for information' or 'individual self-chosen reading' in his lectures were omitted because there were no class libraries at the faculties concerned which would permit the practice of the types of individual reading elicited by such items. Other items which were meant specifically for the staff teaching English as a foreign language had to be readdressed so that they would be responded to by all staff members under investigation using either English or Arabic as a medium of instruction because the items could also be suitable for the latter group and because the EFL staff were very few in number (only four). These items included questions about (i) the degree of importance reading had vis-a-vis other language skills, (ii) the types of reading activities applied in the classroom, and (iii) the level of student's reading in English.

The interview schedule was a structured one which required that the researcher should interact personally with the respondent and write or tick the latter's answers during the interview session. As in the questionnaires, the schedule had boxes made in front of their relevant items for easy checking and left-hand margins for postcoding the items after collecting all the research data for analysis.

The investigator carried out all the interviews by prior arrangement with the interviewees. Some of the interviews took place in the interviewee's own office or staff room while others

took place in the interviewee's regular lecture room immediately after he had finished his lecture session (which was also observed and recorded by the investigator as a part of the fieldwork) and obviously after his students had left the room. Most interview sessions occurred in the first half of the academic day, i.e. between 8 to 12 noon. The average length of an interview session was between 10 to 15 minutes.

Because of the short time allowed for the investigator to complete the main fieldwork, interviewing the only English language laboratory instructor had to be cancelled from plan. The latter interviewee had been absent throughout the implementation of the fieldwork and waiting for his return would have delayed the investigator from pressing on to administer the other instruments of the research scheduled concurrently with interviewing.

4.6.4.4 Classroom Observations

Had the investigator had enough time during the fieldwork, he would have started his classroom observations by properly piloting his slightly adapted version of the RBI protocol in Libya even though this had been adequately validated in its original form in England by its authors. However, the investigator was only able to seize one occasion for such an endeavour when he was allowed to observe and record, using the RBI, a 4th-year lecture session on Linguistics on 4 March 1985 (i.e., at the very outset of the new term).

Despite its apparent unrepresentativeness, the above session was, on the whole, useful in that it helped to refresh some of the investigator's prior knowledge and experience about the standard

classroom routine at Al-Fateh University from which he had then been away and out of touch for almost two years. It was found that the already amended length of session from 40 (as was reported by the RBI's authors) to 57 minutes (the average time of sessions at Libyan universities) was appropriate and that activities such as 'supervising' (for the lecturer) and 'waiting attention', 'observing' and 'practical' (for the student) were irrelevant to the Libyan academic setting under observation and therefore should be omitted from the RBI protocol.

Before conducting the observations, the investigator had obtained the permission of the lecturer to observe his or her lecture session (and also, if possible, to interview him/her after the end of the session as mentioned above). However, in some instances some permission was granted well ahead of the appointed time of the lecture session (i.e., as soon as the class timetable for the new term was made) and in others at the actual time of the lecture session. In the latter case, the lecturer could not be located in advance and therefore he had to be approached for permission whilst he was about to give his lecture.

Having obtained the permission, the investigator (observer) would often enter the classroom without being introduced to the students and sit towards the back of a room appearing to be interested in the topic of the lecture. Students did not seem surprised to have a stranger among them so long as he was seen entering the classroom with their course instructor. Introducing the investigator to the whole class was done mainly in the Faculty of Education where the general and required non-English courses would normally be attended by English specialists alongside groups

from other departments. The investigator was vaguely presented, following Dolan *et al.* (1979), as a visitor/colleague interested in what the group was doing.

The selection of the student for observation would regularly be carried out at the outset of the session and on the spot based upon the investigator's familiarity with such a student in terms of his/her initial cloze test results scored in Libya. Usually, the student so selected would be an average or above average reader sitting very conspicuously to the left or to the right and at one row ahead of the investigator. The annotation of the activities of both the lecturer and the selected student would then be made throughout the session using the RBI.

Two problems faced the investigator during the implementation of the observation phase of the project (which he did without assistance). One was a problem related to distance, where very few sessions had to be observed consecutively but in two different locations (in Education and Veterinary Medicine faculties); the other was related to time, when a very few lecture sessions lasted longer than expected and often used the ten-minute break between sessions. In these limited cases, the investigator had to resort either to abandoning the annotation of the last minutes of the sessions in order to rush to the next and immediate session set for observation or to missing the recording of the early minutes of the latter session to finish recording a previous one.

The observation data were gathered for 22 lecturers and 20 students. 60% of the lecturers were Libyan while 25% were Indian. Of the students' total number, 65% were male and 35% female. The

observations took place between 17 to 24 March 1985 with an average of 1-5 sessions being observed per day.

CHAPTER FIVE

RESULTS OF THE READING CLOZE TESTS

The reading tests for Preliminary-year students under investigation were cloze tests in English and Arabic. They were chiefly administered to serve as criterion measures for the students' questionnaire responses. But, they (particularly English tests) may also be analysed, in their own right, to inform us, for example, about how well students comprehended required, simplified or authentic texts.

5.1 Results of English Tests

Because the experimental groups came from two different major educational streams, i.e., Education (English) and Medicine, and in order to assess their academic reading ability in English, two English cloze tests were constructed, one for First-year English specialists (hereafter known as 'Self-Protection'), and one for Premedicine and Preveterinary-medicine students (hereafter known as 'Tissues'). Before testing Preliminary-year students, English tests were given to 32 Fourth-year English specialists, and 23 Fourth-year Medicine students at Al-Fateh University in Tripoli, in February 1985. This procedure was done mainly to try the tests' method and instructions. Table 5 shows the results of testing the Fourth-year performance.

Table 5: Fourth-year English Cloze Tests

Faculty	N	Mean (Total=50)	s.d.	Rel. (Alpha)
Education (English Dept.)	34	17.0	6.1	.84
Medicine	23	23.7	6.2	.81

After testing preliminary-year students, the investigator administered the English cloze tests again to 32 English native-speakers of Solihull Sixth Form College, Solihull, West Midlands, England, on 14 June 1985. This was undertaken principally to have their results as a basis upon which the scoring of the Preliminary-year performance would adequately be made according to the clozentropy method. The English testees were a First-year A Level Biology class whose Biology Department at the College has had "a good record of 'A' Level performance" (see SSFC Guide to Courses 1985-1986). This criterion group consisted of 26 female and 6 male (thus reflecting the actual sex balance within the SSFC Biology Department), and their mean age was 17. Table 6 shows the best results of this group (see also Appendices 1b and 1e for their scoring sheets with clozentropy values).

Table 6: English Criterion Group Results

	English Cloze "Tissues"	English Cloze "Self-Protection"
Mean	26.8	30.5
Range	36.0 - 20.0	36.0 - 24.0
s.d.	3.9	2.8
Reliability (Alpha)	.56	.32

Note that the low reliability coefficient in English cloze "Self-protection" is due to the small amount of deviation from the mean, suggesting that the criterion group found the test very easy.

The Libyan students' (experimental groups') score data were collected from conducting the tests during March 1985. Counting only the students in attendance throughout the study's fieldwork, a total of 59 First-year English specialists sat English cloze "Self-protection", and a total of 66 students, a combined group of Premeds and Prevets, did English cloze "Tissues". Table 7 depicts the results of the English tests done by the experimental groups. The answer sheets for each test scored by the investigator were based on the clozentropy weightings taken from the English native criterion referred to above.

Table 7: First-year English Cloze Tests

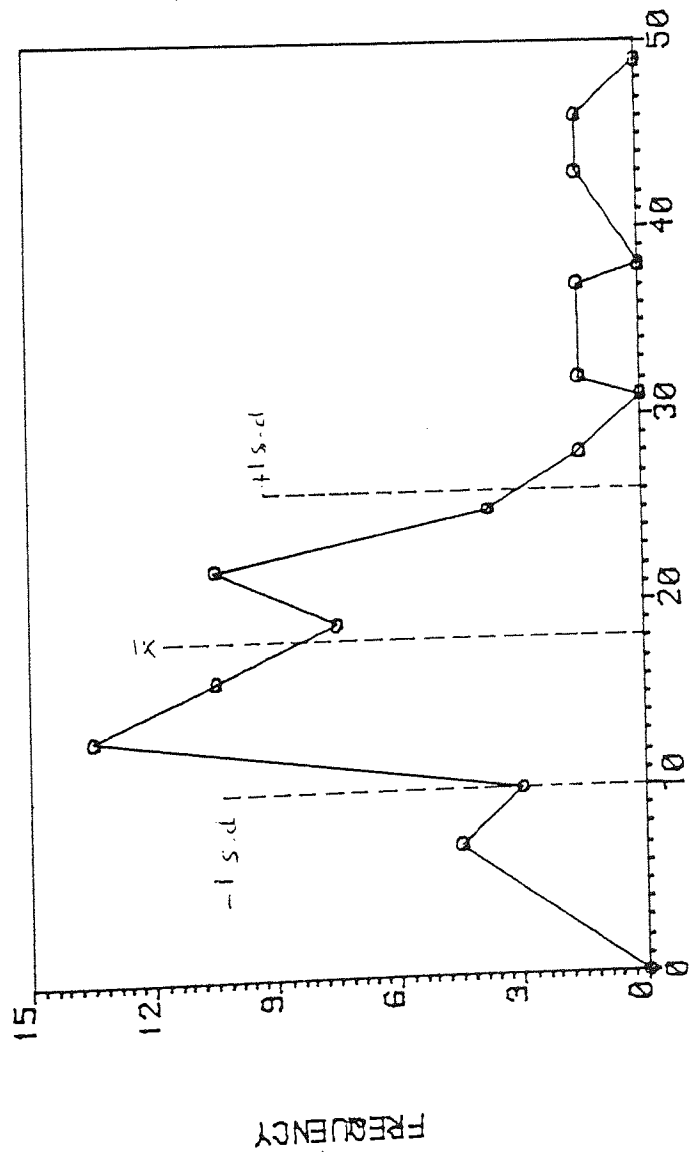
Faculty	N	Mean (Total=50)	s.d.	Rel. (Alpha)
Education (English Dept.)	59	18.2	8.0	.89
Vet-Medicine	33	19.3	6.3	.80
Medicine	33	25.4	6.3	.80
Medicine Total	66	22.4	6.9	.82

For further summary of the test data, frequency polygons were presented in Figures 3 and 4. The raw scores of each major group of students were plotted in 3-point intervals for convenience, and the means and \pm one standard deviation are also shown.

It should be noted that scoring of the English tests for experimental groups through the exact method produced very low raw scores (e.g. a mean of 3.5 made by First-year English specialists, and a mean of 5.7 by the combined medicine group). The Entropy method (see section 4.3.2.3) did, however, increase the English scores of Preliminary-year students to comparatively higher weightings (see Table 7). Note also that relatively high reliabilities resulted from this scoring method. The use of the Entropy method was also adopted in order to ensure uniformity and precision when interpreting the scores made on both English and Arabic tests (the latter was scored by the same method -- see again section 4.3.2.3).

A quick survey of Table 7, and of Figures 3 and 4 reveals clearly the following facts about the English reading performance of the preliminary-year students involved in this study.

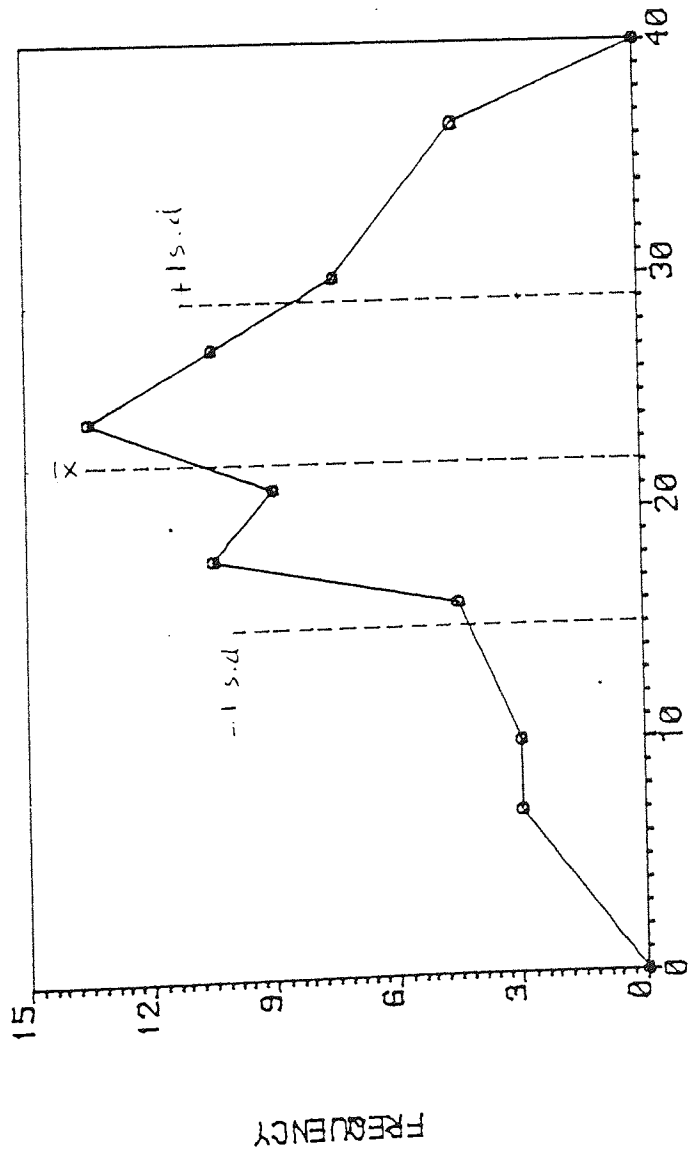
N = 59
 FIRST YEAR ENGLISH SPECIALISTS



ENGLISH SCORES (MIDPOINTS)

FIGURE 3: FREQUENCY POLYGON OF ENGLISH CLOZE RESULTS

N = 66
PREMEDS AND PREVETS



ENGLISH SCORES (MIDPOINTS)

FIGURE 4 : FREQUENCY POLYGON OF ENGLISH CLOZE RESULTS

When converting them into percentages, English cloze scores are generally low, specifically those of First-year English specialists and Prevet-medicine students. The average scores of these latter groups are only 36% and 38% respectively, thus putting them both at the frustrational level (see Betts, 1954 for an early discussion of such reading levels). Any student at this level is said to be unable to use or understand materials at this standard. The two passages of the tests, however, were not particularly difficult for native speakers, nor were they beyond the students' academic scope. According to Flesch Formula applied to each passage for readability assessment, the English specialists' text 'Self-Protection' had a 'fairly easy' score of (.75), while the Medicine text 'Tissues' had a 'fairly difficult' score of (.43). Also reference to scores of the English criterion group in table 6 will reveal almost similar conclusions. Furthermore, the English test passages were randomly selected from two of the students' relevant set textbooks.

Comparatively, the scores of the Premed English cloze test (using the same passage on "Tissues") are rather better, the average score being approximately (44%). This places the Premed group at the instructional level, i.e., they can use material with 'some informational gain' if they are helped by a lecturer or a peer. Still, the Premeds are predicted to have the problem of not being able to deal effectively with their academic reading independently.

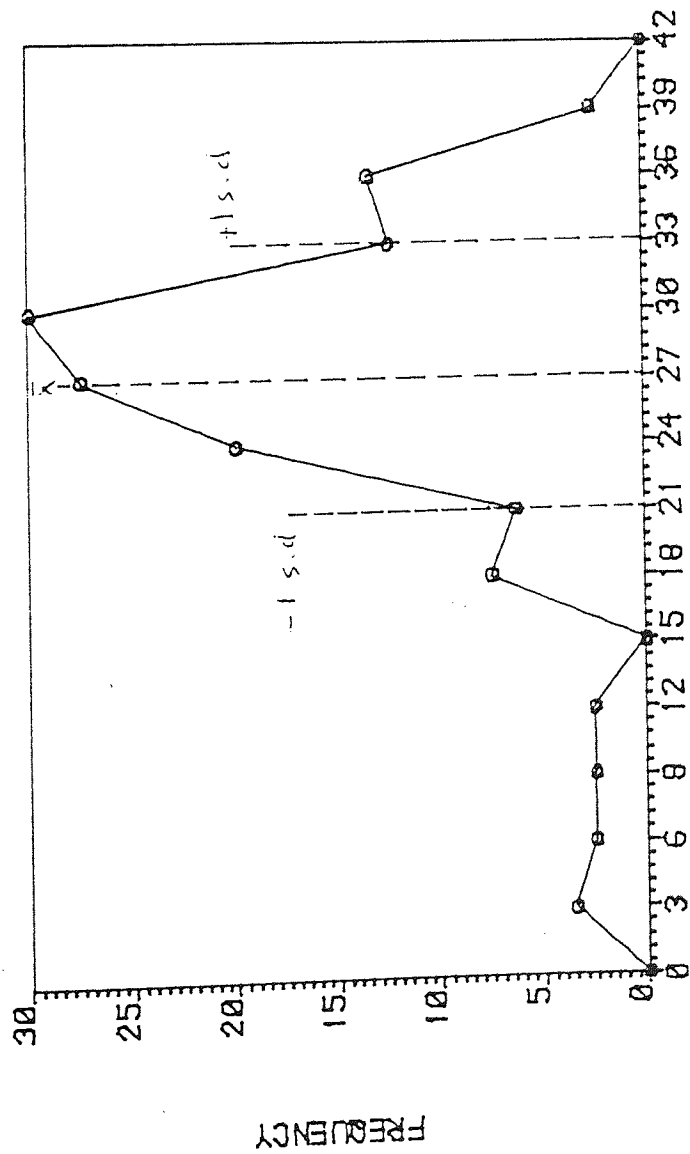
The difference on English test average scores between the subgroups of the combined Medicine group reflects actually the

standards upon which the subgroups were selected for university level. According to the Libyan educational system, 85% is the minimum grade average required of Libyan G.C.E. students (scientific branch) entering the Faculty of Medicine, while 75% is the minimum average required of those admitted to the Faculty of Veterinary Medicine. Admission to the Faculty of Education, on the other hand, demands a lower grade average (65%) than those of the combined Medicine group which perhaps explains, among other things, the relatively lower test average scored by the First-year English specialists.

5.2 Results of Arabic Test

A single Arabic reading cloze test devised by Dan Douglas (1977) was chosen for this study basically as another criterion measure for the students' questionnaire data. A total of 125 returnees (i.e., all the testees of both English clozes) sat the Arabic test in three faculties. Table 8 and Figure 5 show the results of the Arabic test in descriptive statistics, e.g., means and standard deviations, and in frequency polygone form. In Figure 5, the whole sample's scores are shown in 3-point intervals to indicate group pattern of results.

N = 125
TOTAL SAMPLE



ARABIC CLOZE SCORES (MIDPOINTS)

FIGURE 5 : FREQUENCY POLYGON OF ARABIC CLOZE RESULTS

Table 8: Arabic Cloze Test Results

Faculty	N	Mean (Total=50)	s.d	Rel.*
Education (English Dept)	59	28.4	4.0	.53
Vet-Medicine	33	23.2	7.8	.80
Medicine	33	28.2	7.1	.80
Total Sample	125	30.4	7.1	.80

* Reliability values were calculated by using the method (Estimating the approximate reliability of a test) given in David P. Harris, Testing English as a Second Language, New York; McGraw-Hill books Co., 1969, p.145.

From a careful examination of Table 8 and Figure 5, the following facts about the students' performance in Arabic have been noticed:

- 1) According to the percentage cut-off points indicating language difficulty levels currently used for interpreting English results, the whole sample's average entropy score of 61% and standard deviation (in percentage) of 14.3% show that there are a majority of good independent readers of standard written Arabic.
- 2) However, if we look at the Arabic test results much closer, we will find the Preverts scoring relatively lower than the other two subgroups. This was, perhaps, the reason of the positive skewness of the Arabic test frequency polygone shown in Figure 5.
- 3) If we compare the whole sample's Arabic test results with those of the Sudanese Preliminary-year students (who did the same test reported by Douglas in 1977), we will see that the former results (of the Libyans) are rather below the latter

ones (of the Sudanese). A major reason for this is that it appears that Douglas used the same group of students for determining the clozentropy weightings as basis for his analysis. It is necessarily the case that this yields a higher score. It may also be that the Libyan Preliminary-years have a relatively lower Arabic standard than that of their Sudanese counterparts. The fact that the Sudanese results differ from those of the Libyans on the number of testees (73 versus 125; see Table 9) and on the students' composition (the Sudanese belonged to 4 disciplines while the Libyans to 3 areas) might in itself render the above comparison somewhat less important.

Table 9: Comparison between Sudanese and Libyan Arabic Cloze Results

Students	N	Mean (Total=50)	Diff.
Sudanese	73	39.7	
Libyans	125	30.4	+ 9.3

* $p < 0.01$

The difference was significant ($t=10.5$).

5.3 The Relationship between Arabic and English Cloze Results

Tables 10 and 11 show the results of correlations between the English and Arabic tests for each major group of this study's sample. While these correlations indicate statistical significance, none seem to reveal any very strong associations. This fact appears to be in line with Douglas's (1976) finding

(though on learners of different education, culture, and L1). It substantiates his conclusion that there is no or only a weak 'cloze factor' involved when using cloze testing for bilinguals, i.e., whoever is good or poor in L1 cloze test results is likely to be the same in L2 cloze test scoring.

Table 10: Correlations of English Cloze with Arabic Cloze for First-year English Specialists (N=59)

Kendall's Tau	Spearman Rank-Order	Pearson Product Moment
.29	.39	.36

All significant, $p < 0.002$

Table 11: Correlations of English Cloze with Arabic Cloze for Combined Medicine Subsample (N=66)

Kendall's Tau	Spearman Rank-Order	Pearson Product Moment
.29*	.40*	.35**

* $p < 0.001$

** $p < 0.002$

Further discussion of the implications of the test results (in English and Arabic) are made in sections 8.1 and 8.2.

CHAPTER SIX

ANALYSIS OF STUDENT QUESTIONNAIRE DATA

AND THEIR RELATIONSHIP WITH CLOZE DATA

6.1 Introduction

The analysis of the students' collected questionnaire data was planned in three phases. The first phase dealt with item selection, re-coding of the data and looking for general patterns in the variables. The second phase was concerned with scale construction: the purpose was to obtain meaningful factors within the two blocks of the three component conceptual model of this study advanced by Astin (1974) and adapted here as is shown in Figure 1. The third phase was carried out to test the study's main hypothesis which is concerned with relationships among the foregoing three blocks particularly between the reading contextual factors and the students' reading performance scores.

6.2 Phase One

6.2.1 Item Selection

During this phase, a total of 34 items on which personal and reading contextual data were collected, were initially recorded as 60 variables for computer analysis using the Statistical Package for Social Sciences (SPSS, Hull and Nie, 1981). Then, they were reduced to 28 variables based on their similarity in tapping students' opinions and perceptions about the socio-educational reading environment under study. This item selection involved the

deletion of 8 'factual' variables (Moser and Kalton, 1971, p.315, define them as facts relating to respondent, to people he knows or to events) because they yielded divergent results in terms of a marked degree of skewness or considerable discrepancies among the same group of students (see Table 12). Oppenheim (1966, p.57) sums up why such items can always be a problem:

many people tend to answer [such]...types
of question in terms of what they think they
habitually do or aim to do rather than in
terms of facts

Oppenheim's expectation about such items appeared to have materialized with this study's subjects despite the investigator's careful attempt to ensure that the students fully understood the 'factual' questions (see the Methodology Chapter about this point). The items, however, were not dropped completely from the investigation as they were used in cross-checking the lecturers' replies with those of the students -- see section 7.2.5 and its tables 26, 28; also see Oppenheim, 1966, p.72 on the cross-checking technique.

Also included in the item selection procedure, was the reduction of 32 multiple-response variables into 7 individual items. Their data were recorded again to fit the general categorization now given to such items based on the number of attributes or objects each student had or activities performed rather than on the identity of these characteristics.

As an illustration, consider the question on newspaper titles, it was originally presented to the students as a single item of 5 categories (4 named Libyan papers and one 'other' category) from which one or more titles were supposed to be

Table 12: The Relative Frequency (in percentages) of the Eight Factual Variables Deleted, for Each sub-sample of the Study

Factual Variable	1st Year Eng. N=59	Premed N=33	Prevet N=33
Reading involved in Homework			
Yes	71	94	79
No	29	06	21
Use of Lecturer's Handouts			
Yes	41	55	91
No	59	45	09
Use of Textbooks			
Yes	56	76	48
No	44	24	52
Use of General Sources			
Yes	22	09	00
No	78	91	100
Use of Specific Sources			
Yes	08	06	06
No	92	94	94
Type of Textbook Used			
Simplified	40	24	24
Original	03	52	27
Not Applicable	44	00	00
Advice on Assigned Reading			
Yes	29	09	06
No	00	06	00
Not Applicable	71	85	94
Availability of Required Bks			
Yes	12	09	03
No	17	06	03
Not Applicable	71	85	94
Eng. = English	Bks = Books		

chosen. Later, this item was rostered as an individual item of the same number of categories (five) but with general labels: 'none'; 'one title'; 'two titles'; 'three titles'; and 'four titles'. The respondent who, for example, chose two named newspapers, his responses collected for both choices would be added together to yield a combined score which in turn would be rostered in the 'two titles' column of the computer coding form.

6.2.2 Data Re-coding

The data on the twenty-eight selected variables characterizing the reading environment under investigation were next prepared for inclusion in subsequent analysis. Initially, the variables selected were regrouped under five proposed clusters partly on the basis of common sense and partly by the guidance obtained from the work of researchers such as Douglas (1976) and Heather (1981).

It was suggested that variables 7 to 13 (see the list of variables below) could be listed together, and that collectively they would provide a score for what may be called the first cluster: the student's reading habits. Three other variables 16, 17, and 18 being closely related to one another in terms of their measurement of the time spent by the student on reading were jointly classified to produce indirectly a global score for the second cluster: the student's reading attitude (a further justification will be given later in Phase Two about this dimension). Variables 21 to 24 were amalgamated into a single score for the third cluster: reading facilities. The fourth

cluster: academic reading had a global score made of combining the scores for variables 27 to 33. A fifth cluster was lastly suggested for the indicators of student's personal characteristics which were variables 36 to 42.

The re-coding of the selected variables' data was then carried out by assigning them numerical weights according to whether they were in an expected direction or not following (Entwistle, Nisbit, Entwistle, and Cowell, 1971). For instance, for the item on leisure activities, a scale was developed by assigning rank scale scores to general categories of leisure activities based on their number and not on their type. The categories taken in rank order were: 'reading and one activity'; 'one activity'; 'two activities'; and 'none'. To these categories rank scale scores from 3 to 0 were assigned respectively. This was done (for the variable in question) to test the implicit assumption that if a person was busy or distracted by activities other than reading, he or she might give less or no time to reading (see Greeney, 1980; Heather, 1981).

In the list below, the reader will find the five clusters and their 28 selected variables (including the global scores for each cluster) as well as some details of the manner in which each variable was measured.

First Cluster

Reading Habits Variables

Details

V7. Time spent on homework	Six-point scale
V8. Leisure activities	Four-point scale
V9. Newspaper titles	Four-point scale
V10. Magazine titles	Four-point scale
V11. Number of books read	Four-point scale
V12. Number of book types preferred	Four-point scale
V13. Time spent on television	Six-point scale

V15. Reading habits total score	Percentage
<u>Second Cluster</u>	
<u>Reading Attitude Variables</u>	
	<u>Details</u>
V16. Time spent on book reading	Six-point scale
V17. Time spent on newspaper reading	Six-point scale
V18. Time spent on magazine reading	Six-point scale
V20. Reading attitudes total score	Percentage
<u>Third Cluster</u>	
<u>Reading Facilities Variables</u>	
	<u>Details</u>
V21. Book sources	Five-point scale
V22. Use of library	Dichotomy, Yes 2, No 0
V23. Difficulties with library use	Dichotomy, Yes 2, No 0
V24. Place of study	Three-point scale
V26. Reading facilities total score	Percentage
<u>Fourth Cluster</u>	
<u>Academic Reading Variables</u>	
	<u>Details</u>
V27. Dependence on lecturer's handouts	Dichotomy, Yes 0, No 2
V28. Ways of reading texts	Four-point scale
V29. Reasons for reading texts	Three-point scale
V30. Problems of academic reading	Dichotomy, Problems 0, No Problems 2
V31. Use of monolingual dictionary	Dichotomy, Yes 2, No 0
V32. Use of bilingual dictionary	Dichotomy, Yes 0, No 2
V33. Memorizing of reading	Dichotomy, Yes 0, No 2
V35. Academic reading total score	Percentage
<u>Fifth Cluster</u>	
<u>Personal Background Variables</u>	
	<u>Details</u>
V36. Major of student	1st year English, Prevet, Premed
V37. Sex of student	Male 1, Female 0
V38. Accommodation of student	On campus 1, Off campus 0
V39. Father's Arabic reading	Dichotomy, Yes 1, No 0
V40. Father's English reading	Dichotomy, Yes 1, No 0
V41. Linguistic ability	Five-point scale
V42. Age of student	Number scale in years

6.2.3 Results of the Student Questionnaire

This is a description of the results of 125 questionnaires administered in Al-Fateh University in Tripoli, Libya, during early 1985. The respondents (N=125) were the accessible population

of preliminary-year students at three faculties: Education (English Department), Veterinary Medicine, and Medicine, chosen on the basis of their use of English as a medium of instruction.

The purpose of the questionnaire was to find answers to four out of five questions posed by the first major item of the study's problem about the quality of the socio-educational reading context in the university under investigation. These questions focused on four proposed aspects of the university's reading environment: (1) the students' reading habits; (2) the students' attitudes to reading; (3) the facilities available for reading; and (4) the students' reading for academic purposes. Such contextual variables were considered in terms of the main research problem which attempts to assess their relative influence on the subjects' reading performance in English as a foreign language. The following are details of the questionnaire findings based on the five clusters alluded to earlier in this chapter.

6.2.3.1 Background Information

At the outset, let us look at the background characteristics of the whole subjects (N=125): about 26% of them were premedical students, 47% first year English specialists, and 26% preveterinary medical students. They were approximately 58% (N=73) females, and 42% (N=52) males, and had a mean age of 18.7 years. 85% of the subjects lived off campus, while 15% had university accommodation. 91% said their fathers were literate in Arabic, 49% said their fathers could read English. Linguistically, nearly half of the students (47%) said they read extensively in Arabic only. Contrary to expectations, however, almost the rest of them (47%)

claimed to read for enjoyment in one or two foreign languages in addition to Arabic. Further analysis of the latter finding, on the other hand, showed that English was the most prominent of these other languages used alongside Arabic by 42% of the subjects, while French was mentioned by a tiny minority of them (5%).

6.2.3.2 Reading Habits

The students were asked questions about their habits of reading newspapers, magazines, and books for personal enjoyment, the responses of which were re-coded so as to reflect globally the number of periodical titles and books and not their actual types each case claimed to have used regularly. On newspaper reading, a high average of 60% (N=75) said they read one title (this was mainly one of three Libyan state-owned Arabic papers: al-Fajer al-Jadid, the Libyan News Agency's daily, al-Revada il-Jamahiriya, a sports biweekly, and al-Mizaan, another biweekly on police and crime news), while a small proportion of 17% said they never read any newspaper. As expected, the foreign papers were not in any way as heavily read as the local or Arab counterparts: The Guardian and The Times, the only foreign titles reported, were each mentioned by merely one student.

Turning now to magazine reading, it appears that this was yet another favourite pastime slightly ahead of newspaper reading in popularity: 60% of the subjects chose one magazine title which they claimed to read weekly, while about 3% said they never read magazines. The one title read by the above majority was one of three non-Libyan Arabic magazines: Kul Al-Arab, on general Arab

politics, al-Nahda, on women, and Nadeen, on pop music, films, and star gossip.

On book reading, students, on the whole, seemed to be rather eager to read books -- other than textbooks, as more than half of the sample (almost 58%) reported that they read between two books or more every three months, whereas a small group (10%) said that they did not read any books. More interestingly, a higher proportion of subjects (75%) claimed to read three different types of books (specifically books on social problems, stories, and science), while a lower proportion of them (about 22%) had preferences between one to two books.

To gain some insights on what kind of out-of-university preoccupations the students might have, and see if these concerns competed with or acted as distractions to their leisure reading, three questions were asked about the students' spare time activities and time spent on television and homework. Based on the re-coding of data, referred to earlier, the highest value of 3 points given to the users of one leisure activity plus reading was earned by a relatively large group (59%), whereas the lower values of 2 and 1 points, for the users of one or more activities, were obtained by a small group (41%).

The activity cited alongside reading was one of the two most frequently chosen pastimes (according to responses): listening to music and watching television. The latter interest was further explored by asking the students how much time they spent viewing television on average during the term. A majority of approximately 66% answered that they spent between 1 to 3 hours a night watching television, while a minority of 13% said they spent

less than one hour of TV viewing. Regarding homework, a somewhat higher percentage (70%) of students appeared to spend the same time interval (1-3 hours) daily completing their assignments. But time intervals more or less than the foregoing one (under 1 hour and above 3 hours) were used by much lower percentages: 7% and 23% respectively.

6.2.3.3 Reading Attitudes

The measurement of attitudes to reading was done by asking the students indirectly about the time they usually spent every week on the three media of books, magazines, and newspapers. The implicit assumption upon which this method was based maintains that the more time reported, the more interest shown in reading (see Douglas, 1976, p.112).

Although the general pattern of students' responses indicates that above half of students did read, further analysis of this point showed that the sample reported spending more time reading magazines than on the other two media: an average of 2-3 times per week was mentioned for reading magazines compared with an average of 'once' a week for newspaper and book reading.

6.2.3.4 Reading Facilities

This is the third major area of the questionnaire on which various items were constructed to yield information about: (1) the sources of books used by the subjects; (2) the use of the faculty or main library at the university; (3) the difficulties associated with the use of library; and (4) the place preferred by the students for study. The re-coding of the first item focused on the

number rather than the type of book source and was based on the implicit assumption that the more sources a student obtains, the more eager reader (or high scorer in a reading test) he is likely to be (see Douglas, 1976, p.124).

68% of the subjects reported, however, only one book source (especially from friends or bookshops), while 22% of them said they acquired books from two sources. As for the lending library, more than half of the sample (58%) said they never used it, whereas 42% of them said they were regular users. The latter group were then asked if they had encountered any difficulty with the lending library. Surprisingly, 84% of them frankly stated that they faced some problems, principally the difficulty of finding books, and the library's restriction against allowing them to borrow sufficient number of books. According to the guidebook of the Education Faculty's library at Al-Fateh University (1984), the library lends to the first and second year undergraduates only two books at a time provided they have paid a returnable deposit of 20 Libyan dinars (almost \$50) for each academic year. Only 16% of this group (regular users) had no problems with the library.

The use of the lending library was investigated yet again by another question to see if it had been recurrently utilized as a place for study and not only for borrowing books. Once more, the students' responses suggested the apparent inability of the lending library to attract many users from among the study's sample. Instead, it was the 'home' which came out as the most popular and singular place for study: an overwhelming majority of 82% said they normally study there.

6.2.3.5 Academic Reading

In addition to the students' recreational extensive reading, information about their academic reading (the fourth proposed dimension) was obtained. The latter cluster was largely concerned with the students' use of assigned reading. The types of, ways of dealing with, problems of and reasons for such reading were the subject of 13 questions originally presented to the sample. However, not all the data collected on these items were useful as has already been examined in this chapter. Therefore, for the analysis reported here, only the information gathered on seven meaningful academic reading variables are considered.

In the area of assigned reading types, the lecturer's handouts (worksheets, etc.) emerged as a common reading matter upon which slightly more than half of the sample (55%) depended for passing their examinations, while a relatively smaller proportion (45%) seemed to rely on other sources (mainly textbooks). The figures on the use of dictionary, nevertheless, showed a sharper contrast. Table 13 gives the contrast observed between the users of monolingual dictionary (English/English) and those of the bilingual dictionary (English/Arabic). It was found that the latter group were apparently more in number (91%) than the former one (27%).

Table 13: The Contrast between the Users of Monolingual Dictionary and Those of Bilingual Dictionary

N=125 Type of Dictionary	Relative Frequency (PCT)
Monolingual	
Yes	27
No	73
Bilingual	
Yes	91
No	09

With respect to reading strategies, the students were asked how they read a recommended book or article in their field of study. Four basic methods of reading texts were also listed for their selection: (1) reading from cover to cover; (2) discovering specific information; (3) picking out the main ideas; (4) selecting chapters for intensive reading. Because this item was of multiple-response type, its collected data were recorded to fit a single quantifiable variable of general categories focusing on how many ways each student had employed for academic reading rather than on what the identities of such strategies had been.

A high proportion of the sample (68%) knew only one way of reading (specifically, 'selecting chapters for intensive reading'), whereas the better readers using two or three approaches to reading scored much lower percentages: 27% and 5% respectively. The topic of reading strategies was further probed by another question on the use of memorization (a cultural phenomenon -- see section 4.2.2.4 [7] explaining it). It was found that the sample was somewhat split on this point as almost half of them (47%) said

'yes' to memorization, while a slightly more than this proportion (53%) said 'no'.

In order to have a general idea about the difficulties which the students might have experienced as a result of their use of assigned readings in English in particular, a multiple-choice question was asked including these problems: 'much reading matter'; 'difficulty of reading texts'; and 'following-up references'. Again, such an item was transformed into an individual variable (a dichotomy) for which its collected data had to be re-coded accordingly. The number of students who had problems with reading for learning in English was analysed against the number who did not have any reading problems in that language. Nearly two-thirds of the whole sample (73%) mentioned that they had encountered one or another of the foregoing problems compared with a proportion a little above one third (27%) who said they had not any problems.

Finally, the students were asked why they read texts in their field of study. Although this question was of a multiple-choice structure, only one choice was required from every student. The item was, however, slightly re-coded on the basis of three general categories: 'tutor's requirement'; 'tutor's recommendation'; and 'voluntary reasons'. To conform with the criteria already set forth for data recording, i.e., quantifiability and compliance with research expectations, the latter category was introduced as a general label of the highest point encompassing the data collected on the item's initial three categories collectively suggesting the notion of 'voluntary

reasons': 'interest in topic'; 'to find evidence for writing'; and 'other reasons'.

Statistically, a large proportion of students (61%) said they read their subject specific texts because of voluntary reasons. But a relatively smaller proportion of them (39%) indicated that they read such texts because these were required or recommended by their tutors .

6.3 Phase Two

6.3.1 Scale Construction

Having examined the frequency distributions for all items in the questionnaire and checked them for doubtful cases, it was necessary to construct from the data available, measures for the various aspects of the students' reading environment under study. This section will give a summary of the procedures used.

The first step was to examine the reliability of each set of items. It was found that clustering the items according to the already suggested arrangement was not entirely satisfactory. The estimates of reliability (Coefficient Alpha, Cronbach, 1951), and the number of items used in each proposed scale are listed below:

1. Student's reading habits (n= 7, Alpha= 0.01) .
2. Student's reading attitudes (n= 3, Alpha= 0.58) .
3. Use of reading facilities (n= 4, Alpha= 0.39) .
4. Student's academic reading (n= 7, Alpha= 0.33) .

From this list, only the scale for reading attitudes seems to have a moderate estimate of general reliability (r= 0.58) .

This situation prompted the use of a more precise method for scale construction: the factor analysis technique, which provides

us with reliable and meaningful common dimensions underlying such sets of variables. Accordingly, the second step of procedures involved, as a starting point, the examination of the results of Principal Component Analysis to see what clusters of items they

Table 14: Factor Matrix for the Reading Environmental Variables
(Using Principal Component Analysis)

Variables	Common factor loadings					Communality (h ²)
	I	II	III	IV	V	
V7 Time on homework	-33					25
V9 Newspaper Titles		-51				32
V11 No. of bks read	51		40			51
V12 Book preferences			36			27
V13 Time on television				42	-36	41
V16 Time on newspapers	64	-58				88
V17 Time on books	38		46			42
V18 Time on magazines	61	-48				70
V21 Book sources			41			35
V22 Use of library	47			-49		62
V23 Library problems				-43		26
V29 Reasons for reading					-34	23
V30 Problems of AR		36				32
V31 Use of MD	45	46				58
V32 Use of BD		35				38
Eigenvalue	2.33	1.76	1.38	1.02	0.63	

Decimal points omitted.

Bks= books; AR= Academic reading; MD= Monolingual dictionary;
BD= Bilingual dictionary.

produced, and decide how many of them to keep for rotation. The factor matrix received from the computer is displayed in Table 14 with only highlights of the loadings under each common factor.

To interpret this matrix, an arbitrary criterion of + 0.40 to the factor loadings was used (a conservative approach is to consider 'significant' only loadings greater in magnitude than 0.40 -- see Kerlinger, 1973, p.662) . Judging by their positive meaningful loadings, the six variables, in the first factor, seem to have a general interrelationship among them. However, a glance at the variables' correlation matrix (see Appendix No.3c) will reveal a split within such a pattern. Variables 11 and 17 appear to constitute a separate pair possessing together a higher positive correlation of ($r=.53$), while variables 16 and 18 form another distinctive pair with even higher correlation ($r=.78$). Variables 22 and 31 do not correlate at all.

The second factor represents a bipolar factor (having both negative and positive significant loadings). Evidence from the correlation matrix shows that this factor's six major variables are in fact two different sets of variables, each has high positive correlations between its variables, and each measures a different aspect of the environment in question. Variables 9, 16, and 18 deal with media reading whereas variables 30, 31, and 32 with academic reading. Unlike factor I, factor III is probably more coherent in drawing together a cluster of variables with positive significant values measuring the same aspect of book reading habits.

In the fourth factor, two out of three variables having significant loadings can make a coherent set (variables 22 and 23)

which might measure the use of the lending library aspect. Furthermore, this factor constitutes approximately 15% of the total variance which, according to Kaiser's criterion, can justifiably be retained for subsequent analysis. The fifth factor, however, lacks a sensible pattern as its two variables has rather moderately significant but negative values and its percentage of total variance is also very low (9%).

Thus far, we have been able to identify almost four common factors and a general one, each of which has an eigenvalue greater than one except factor V. However, owing to a certain amount of confusion within each of them, it was necessary to apply the rotation solution for clarifying such factors and rendering them useful. The derived solution used in the third step of procedure was the oblique rotation. Table 15 illustrates the outcome of such rotation solution.

Table 15: Oblique Analysis of Reading Environmental Variables

Variables	Rotated factor loadings				
	I	II	III	IV	V
V7					+.43
V9		.54			
V11			.57		
V13					-.42
V16		.93			
V17			.59		
V18		.82			
V21			.55		
V22				.61	
V23				.48	
V29					-.49
V30	.51				
V31	.75				
V32	.63				

Decimal points omitted
Significant loadings shown

For consistency, the same arbitrary criterion of +0.40 was again employed for interpreting the rotated factor values. The picture in Table 15 looks much clearer and more sensible than the one in Table 14; it also indicates some change of emphasis in each factor. Now, we have 5 distinctive factors. The second factor, for example, previously had two different sets of variables but after rotation it contains only one set of already higher values (this set consists of variables 9, 16, and 18). The other dimension (for academic reading aspect) is represented separately by another factor (factor I). Factors III and IV, each has retained its coherent dimension and eliminated the unrelated ones. In factor V, we have three variables (a positive V7, and negative V13, and V29) which indicate two facts: (1) they are conceptually related; and (2) the investigator's initial expectation about them was contrary to reality. Originally, it was thought that a student with a high point on V17 (i.e., spending less time on homework) would relate to his high point on V13 (i.e., spending less hours watching TV). It appears, instead, that students who spent more time on homework actually seemed to have watched television more. In other words, there was no opposition between watching television and doing homework. This seems to be broadly in line with Greeney's (1980, p.355) finding which indicates that TV viewing is 'accommodated without dropping other leisure reading'. If we add to both variables a negative V29 (reasons for reading assigned work books rather than "pleasure" books), the picture of factor V will be relatively complete: the three variables under the fifth factor belong to the single concept of 'studiousness'.

For these final habitual and attitudinal dimensions of the reading environment under study coefficients of reliability (Coefficient Alpha, Cronbach, 1951) were next calculated. Table 16 presents information about the reliability of each dimension reported under each of the foregoing five computerized factors. The reliability coefficients obtained for the first four dimensions in Table 16 were considered to be of acceptable level. The last dimension, 'studiousness', on the other hand, had a rather low reliability coefficient.

Table 16 : Reliability Coefficients for the Five Dimensions

Dimension	No. of Items	Coefficient Alpha
Academic English reading practices	3	0.65
Media reading habits & attitudes	3	0.77
Book reading habits & attitudes	3	0.58
Use of library	2	0.53
'Studiousness'	3	0.35

6.4 Phase Three

6.4.1 The Relationship between Reading

Environment and Reading Performance

In the third phase of questionnaire data analysis, the relationship between the background variables, habitual and attitudinal dimensions of the reading environment and English reading performance scores relevant to the main hypothesis of the investigation was tested by employing a multiple regression sub-programme of SPSS. The Study's main hypothesis states that

Reading performance in English as a foreign

language may be more crucially affected than is commonly realized by the broader context (the social and educational reading environment) of the EFL reader. This, if supported by the evidence, would mean that if one improves the reading environment such as the one mentioned earlier, performance in EFL reading will improve too.

Because the study's subjects came from two different major streams: English and medicine, and because they were all native speakers of Arabic, it was necessary to collect the data concerning the student's reading performance (the criterion variable) by three measures: one Arabic reading test and two separate English reading tests. Therefore, three separate regression analyses were performed: 1) for the whole sample, 2) for the first year English specialists, and 3) for medicine students (premeds and prevets). The results will be reported in that order in two stages: Stage One will investigate the effect of background and reading environmental variables on Arabic reading performance, and Stage Two will examine the effect of such independent variables and of Arabic reading ability (entered as an independent variable) upon EFL reading performance.

It should also be noted here that when running these two-stage regression analyses, the investigator encountered the following dilemma: Arabic and English abilities were both considered as inputs and outputs. Before being promoted to university level, the subjects of this study had had some knowledge (albeit at a different command level) of the two languages. When at college, these students had to learn either through one or both of them. Yet, written Arabic might be a larger input for such students because of the fact that the students were

much more exposed to it (than to English) inside and outside the classroom. Obviously, because written Arabic is the students' official L1. Hence, the students' knowledge and use of Arabic would be on a wider scale, and perhaps on a daily basis well before coming to college. This dilemma (whether to treat Arabic ability as an input or output) is reflected in the analyses that will follow.

As far as all independent variables were concerned, the investigator had to run several regression analyses for each group of students prior to arriving at the final results of each regression. The purpose was to acquire the most consistent and substantive independent variables accounting for the variation in the criterion measure of that group.

6.4.1.1 Stage One: The Whole Sample

Table 17(a) reports the results of the regression analysis for the total sample of the study (N=125). Although this analysis might not be directly relevant to the study's main hypothesis which focuses on the relationship between the reading environment under investigation and EFL reading performance, it was carried out principally to see if the same relationship also exists between such independent variables and reading ability in Arabic.

It should be noted in Table 17(a) that some independent factors of the student's reading environment collectively explained 21% of the variation of the criterion scores. Such proportion was found to be highly significant considering the number of the whole sample ($F= 3.1$, $df= 9/106$, $p<0.01$). The degree of importance of each group of independent factors to performance

in Arabic reading was, however, different. The proportion of variation contributed by the background variables was rather smaller (9%) than that made by the group of factors associated with reading environment over and above background variables (12%). But the value of F for these two proportions was significant.

Table 17(a): Results of Regression Analysis for the Whole Sample: Background, and Reading Environmental Variables with Arabic Reading Performance

Source of variation	df	Proportion of variation explained	Mean square	F
Background	5	0.09	0.018	2.4*
Reading Environment over and above b/g	4	0.12	0.03	4.0**
Residual	106	0.79	0.0074528	
Total	115	1.00		

**p<0.01
*p<0.05

b/g= Background

Having reported the overall results (the analysis of variance) of the whole sample's regression analysis, it is now, perhaps, appropriate to examine further such results to see what specific variables within the set known to be significant relatively made important contributions to Arabic test scores. The standardized regression coefficient (beta weight) reaching the value of or being greater than ± 0.20 was used as a guide to identify such variables and report them here (this will also be applied to the regressions of Stage Two).

Table 17(b) shows the most effective independent variables in the whole sample's regression analysis. The only variable that seemed to have important impact on the Arabic reading performance within the significant background dimension was the sex of student. However, the negative beta weight of this variable reflected the fact that there was a significant difference between the sexes in their scores on the Arabic reading test. (Section 8.3.1 discusses in detail the study's finding which indicates that female students (coded 0) outperformed their male counterparts (coded 1) in the Arabic test). For the significant reading environmental dimension, two variables, "reasons for reading" and "use of library", made major contributions. The negative sign of the latter's loading suggests, nevertheless, that library non-users were, perhaps, more among the high scorers than among the low scorers in the Arabic test (a further comment will be given later in sections 6.4.1.2 and 8.3.3 about this finding).

Table 17(b) The Most Effective Independent Variables in the Regression Analysis of the Whole Sample

Independent Variables	Beta Weight
<u>Background:</u>	
Sex	-0.28
<u>Reading Environment:</u>	
Reasons for reading	0.24
Use of Library	-0.22

6.4.1.2 Stage Two: The sub-samples

6.4.1.2.1 First Year English Specialists

Table 18(a) summarizes the results of the regression analysis for first year English specialists (N=59). The figures show that explanatory variables: the background variables, reading environmental factors, and "Arabic reading ability" explained 43% of the variation of the English reading cloze test scores. Their joint relationship to the criterion measure was found to be significant ($F= 2.9$, $df= 10/39$, $p<0.01$). Of this variation, 25% was explained by the background variables, 9% by the reading environmental factors over and above the background variables, another 9% by "Arabic reading ability" over and above both foregoing variables, and 57% by residual factors. Note, however, that, apart from the residual factors, the background variables as well as "Arabic reading ability" seem to play a major part in English reading performance while the reading environmental variables play an insignificant role in that criterion measure.

Table 18(a): Results of Regression Analysis for First Year English Specialists

Source of variation	df	Proportion of variation explained	Mean square	F
Background Reading Environment over and above b/g	6	0.25	0.04166	2.8*
Arabic over and above other two	3	0.09	0.03	2.0 NS
Residual	1	0.09	0.09	6.1*
Total	39	0.57	0.01461	
	49	1.00		

* $p<0.05$ b/g= Background NS= Not Significant

Table 18(b) presents further results of the English specialists's regression analysis by showing the influential independent variables whose beta coefficients was $\pm .20$. According to such estimates, "Arabic reading ability" appeared again to be a powerful variable as indicated by its high positive beta weight of 0.34. But, none of the background variables' beta weights reached the standard of $\pm .20$, thus hinting that only collectively did such variables seem to be able to contribute significantly to the variation of the English test scores. By contrast, some reading environmental variables had major effects individually. "Academic English reading practices" and "reading of various magazine titles" respectively contributed with positive estimates (0.30, and 0.22), while media habits and attitudes (mainly associated with time spent on media and newspaper reading) was negatively related to the criterion measure suggesting a relationship between less scoring in the English reading test and more hours spent on reading the media, especially Arabic newspapers.

Table 18(b) The Most Effective Independent Variables in the Regression Analysis for the First Year English Specialists

Independent Variables	Beta Weight
<u>Background</u>	None
<u>Reading Environment:</u>	
Reading magazine titles	0.26
Media habits & attitudes	-0.24
Academic English reading practices	0.31
<u>Arabic Reading Ability</u>	0.34

6.4.1.2.2 Combined Medicine Sub-sample

In Table 19(a) the results of the regression analysis for the combined Medicine sub-sample students have been presented. Again, the joint contribution (48%) of the reported explanatory factors associated with background characteristics, reading enviromental, and Arabic reading ability dimensions appears to be highly significant ($F= 2.8$, $df=13/39$, $p<0.01$). However, the major difference between the regression coefficients here and those of the English specialists involves the importance of more factors associated with the student's reading environment over and above background variables to English reading performance ($F=3.4$ $df=7/39$ $p<0.02$). Unlike their effect alluded to earlier in the analysis for English specialists, the background variables were not significant as a whole dimension.

Table 19(a): Results of Regression Analysis for Combined Medicine Sub-sample

N=66 Source of variation	df	Proportion of variation explained	Mean square	F
Background Reading Environment over and above b/g	5	0.10	0.02	1.5 NS
Arabic over and above other two	7	0.32	0.04571	3.4**
Residual	1	0.06	0.06	4.5*
	39	0.52	0.01333	
Total	52	1.00		

NS= Not significant

** $p<0.01$

* $p<0.05$

Table 19(b) giving the important beta weights of the combined sub-sample's regression analysis shows, however, that among the latter dimension (background), "father's Arabic reading" seemed to be the only effective independent variable. The negative beta weight of the this variable suggested that there was, perhaps, an association between low scoring in the English reading test and those students fathers' literacy in Arabic.

Table 19(b): The Most Effective Independent Variables in the Regression Analysis for the Combined Medicine Sub-sample

Independent Variables	Beta Weight
N=66	
<u>Background:</u>	
Father's literacy in Arabic	-0.21
<u>Reading Environment:</u>	
Magazine reading	0.21
Book habits and attitudes	0.25
Use of Library	-0.20
Academic English reading practices	0.38
Place of study	-0.26
Ways of reading	-0.22
<u>Arabic Reading Ability</u>	0.28

Of the seven variables which collectively helped to make a rather significant reading environment dimension, six variables contributed effectively but with different directions to the variation in the criterion measure. The three variables of "book habits and attitudes", "reading various magazine titles", and "academic English reading practices" were positively related to raising the student's score on the English reading performance test. The other three variables of "place of study", "use of library", and "ways of reading" were all negatively related to the

same criterion measure. As will be discussed in some detail in Chapter Eight, the negative beta weight is to be interpreted in the light of numerical values assigned in coding such variables. Thus, contrary to expectations, the non-users of the library and those who studied privately in one place (both coded 0) obtained relatively higher scores on the English reading test. However, according to expectation, those who said they used a single (inflexible) reading style (coded 0) scored lower marks.

Based on the evidence produced by the regression analyses for the three groups alluded to earlier, the general thesis that the reading environment affects reading performance seems to be supported. But there are some specific divergencies from expectation, e.g., the negative beta weight for Use of Library showing contrary to expectation, weaker students made use of the library. These and other regression and non-regression findings are discussed further in Chapter Eight.

CHAPTER SEVEN

RESULTS OF RBI AND STAFF INTERVIEWS

7.1 Results of RBI (Classroom Observations)

The tables in this section sum up the data obtained from the investigator's classroom observations which attempt to answer the following questions posed by this study:

- 1) What percentage of reading time is given to reading across the curriculum ?
- 2) Is the reading activity continuous or fragmentary in the classroom ?

The implicit assumption that the answers to these questions might help to show is that the more time is relatively given to EFL and L1 active reading across the curriculum, the more opportunity for practice in that sort of reading is likely to be achieved, and more practice (particularly in out-of-university reading assignments) will lead to better understanding and enjoyment of reading matter, and hence to improvement in reading (Lunzer and Gardner 1979; Nuttall 1982).

This assumption is related to the central hypothesis of the study which seeks to substantiate that the reading environment can influence the EFL reading performance of the student. It deals with an important aspect of his reading environment, that is, the classroom context whose existing procedure is here described. This is to see if such a procedure made a suitable context for encouraging active reading (i.e., where reading purposes are clear

and specific and when reading is shared: students working in small groups and/or reacting to a discussion led by the lecturer -- see Davies and Greene, 1984, p.24).

It should be noted that statistically the data reported in this section might need more representation of sessions for each subject area in the student's curriculum. However, owing to practical considerations such as the limited short time given to the investigator to do all the required research fieldwork, it was only possible for the investigator to select randomly one session for every subject area attended by the total of 20 preliminary year undergraduates and their 20 appointed lecturers mainly from two of the three faculties involved in this study: Education (English Department), and Veterinary Medicine during a two-week period of observation in March 1985. Accordingly, the collected data of such observations were aimed at projecting a general picture of actual classroom practice within this period using an adapted version of the Reading Behaviour Inventory devised by Dolan et al. (1979).

7.1.1 Time Spent on the Activities Observed

The overall time spent on classroom activities was classified according to the medium of instruction (Arabic or English) being used in the subject areas of each major field of study: first year English and Prevet Medicine. Table 20 shows the overall percentage of time spent by lecturers on the activities mentioned in the Inventory. Table 21 indicates the overall pattern of percentages of session-time spent by students on such activities.

Table 20: Total Percentage of Lecturer's Time Spent on Various Activities

<u>First Year English</u>	Admini- strating	Writing	Reading	Discuss- ing	Indiv. tuition	Inform- ing	Total** minutes
Arabic-medium subject areas	16	17	5	24	-- --	55	350
English-medium subject areas	3	16	21	23	4	27	150
<u>Prevet Medicine</u>							
English-medium subject areas*	11	59	3	12	1	64	450

Notes

**The total minutes observed of a 50-minute sessions in each subgroup or group of subject areas.

* Arabic as a subject area was dropped from analysis because it was only one subject that could not be compared with anything similar in the group.

- Percentages add to more than 100% because activities are not exclusive, i.e., a student may be observed as doing two activities concurrently.

Looking at the lecturer's table, it appears that lecturer-time is dominated by one activity, lecturer informing, no matter what medium of instruction is used in both major disciplines. It occupies the first place in both fields with percentage times 47% and 28% for first year English, and 43% for prevet medicine. However, the two major disciplines seem to differ on the lecture-time spent on two other categories, lecturer discussing and lecturer writing. In both subgroups of first year English, lecturers spent between 20% to 25% of their time discussing while

in prevet medicine their counterparts spent much less time, 8%, practising this activity. The latter placed, instead, more emphasis on writing which reached 39% of their lecture-time while the former gave this category between 15% to 17% of their time

Lecturer reading (mainly reading from a worksheet) was, on the other hand, almost the least practised activity in all groups except in the English-medium subgroup of first year English where it accounted for 23% of lecturer-time.

If we now turn to the student's table, we will see a reflection of the situation depicted by the lecturer's table. In both major fields regardless of what medium of instruction was being employed, students spent between 30% to 50% of session-time listening to lecturer informing. They also spent between 29% to 37% of session-time writing (chiefly direct copying) the information spoken, or written by their lecturers. Although, copying is admittedly an inescapable common practice in learning situations, it may, according to Dolan *et al.* (1979) and Davis and Greene (1984), 'limit the purpose of reading'. They considered copying, particularly, 'transferring information mechanically from source to textbook' as an approach that might deprive learners from practising 'a reflective use of language to establish principles and ideas' (see e.g., Dolan *et al.*, 1979, p.122). This argument was made about English children of junior and secondary-school levels. One wonders if the same assumption would be applied to our sample of non-native speakers of English who were also preliminary-year university students?

Student reading, however, is shown relatively much more practised in the English-medium subgroup of first year English

specialists than in any other areas, thus reflecting the similar focus of the lecturers of such subgroup on this particular activity.

Table 21: The Percentage of Student's Time Spent on Various Activities

<u>First Year English</u>	<u>Admini- strating</u>	<u>Writing</u>	<u>Reading</u>	<u>Listening</u>	<u>Not Involved</u>	<u>No. of Subj. Areas</u>
Arabic-medium subject areas	1	43	6	60	10	7
English-medium subject areas	8	36	25	37	19	3
<u>Prevet Medicine</u>						
English-medium subject areas	2	46	6	51	20	9

* The subject areas, zoology, general chemistry, and biochemistry taught in the prevet medicine department used Arabic along with little English for lecturer informing.

7.1.2 Types of Reading Practised in Classroom

But what kind of, and how much, reading was actually done by our sample of students? As indicated in the methodology chapter concerning the data collected in classrooms, reading was defined as any kind of reading including, inter alia, what Dolan et al. (1979) called 'glancing at some instructions' written on the chalkboard, O.H.P, or in textbook, lecturer-produced handout, or student-produced notes. To report the different kinds of reading practised in classroom objectively, the investigator followed the technique adopted by Dolan et al. (1979) who classified reading types according to time episodes ranging from 1-15 second episode (type 1 identified as "intermittent reading") to 46-60 second

episode (type 4 identified as "continuous reading"). At the end of every time-sampled minute in the RBI, whatever reading done by the student under observation, if any, was promptly recorded. Table 22 shows the percentages of time allocated to the four different types of reading in each of the two major disciplines involved in the study.

Table 22: Pattern of Continuity in Reading for each Group of Subject Areas in Each Major Discipline Given as Percentages of the Total Reading Observed in the Group

<u>First Year English</u>	Type1	Type2	Type3	Type4	Total*
Arabic-medium subject areas	82	--	9	9	22
English-medium subject areas	46	41	8	5	37
<u>Pre-Vet Medicine</u>					
English-medium subject areas	57	36	3	3	28

Notes

* Total minutes observed for reading.

Type1= 1-15 second total reading during time-sampled minute

Type2= 16-30 second total reading during time-sampled minute

Type3= 31-45 second total reading during time-sampled minute

Type4= 46-60 second total reading during time-sampled minute

The data in Table 22 clearly indicates that 'intermittent reading' (type 1) was the most frequently practised kind of reading across the curriculum in both major fields of study. However, this type of reading was relatively at its highest percentage (82%) in the Arabic-medium subject areas of first year English, and was at its moderate levels (46% and 57%) in the

English-medium subject areas of both major disciplines. In addition to type 1, type 2 of reading was observed in the latter subject areas again with moderate proportions (41% in 1st year English, and 36% in prevet Medicine), thus suggesting that there was proportionately a little more exposure to the written word in such subjects than in their Arabic counterparts.

Perhaps, this dominance of student passive activities such as the ones reported earlier, listening, copying, and fragmentary reading was due to classroom procedures carried out across the curriculum in both major fields of study involved in the investigation. These information-processing activities were probably a reaction to the lecturers' resorting almost exclusively to oral informing coupled with writing (though slightly less frequently) rather than to balancing such lecturer activities with enough practicals (i.e., lecturer-led discussions about a relevant text which "result in selective and structured note-making") (see Davis and Greene, 1984, p.34-35).

7.2 RESULTS OF INTERVIEWS WITH LECTURERS

7.2.1 Introduction

What are the reading habits of the lecturers of this study's undergraduates? How do they use reading in the classroom and for homework?

These questions are central to the present study in that they both attempt to find out if the lecturers (who are another critical dimension of the student's socio-educational reading

environment) do believe that reading is important. Kohl (1973), Nuttall (1982), and Smithies (1983) agree that teachers of either L1 or FL learners should themselves be intrinsically motivated to read. The assumption on which they seem to base their foregoing conviction is succinctly summarized by Kohl (ibid.):

People who don't read or write themselves with any frequency or joy have a hard time getting others to read and write. It is difficult to teach people to value what you yourself do not value... (p.146)

The lecturers' exploitation of the various classroom activities including reading was already reported in the first half of this chapter. However, this was observed and recorded by the investigator while the lecturers were actually engaged in the activities. Now, it is the turn of the lecturers themselves to tell us about their practice of such activities (particularly reading) and their habits and attitudes in and towards academic and leisure reading. To get this account, the investigator conducted 22 structured interviews in the two faculties involved in this study, especially in the previous small scale investigation on reading behaviour observed in classroom: English Department (Faculty of Education), and Vet-medicine Faculty at Al-Fateh University during March 1985. The interview subjects were 22 lecturers assigned to teach the preliminary year students (this study's subjects) of both institutions. Thirteen of them came from the Faculty of Education and nine others from the Vet-medicine Faculty.

Each structured interview comprised of 24 items of lecturer reading habits and classroom reading practice. In the following paragraphs a description is given of the responses to these items classified under four main headings. To begin with, a general list is presented below of the four headings and the items which define each one of them in broad terms:

- a) Background
 - 1 Sex
 - 2 Nationality
 - 3 Subject
 - 4 Time spent in faculty
 - 5 Time spent as course tutor

- b) Reading for Academic purposes
 - 6 Reading for the course
 - 7 Types of reading materials read
 - 8 Frequency of academic reading
 - 9 Language(s) used for reading

- c) Reading for Pleasure
 - 10 Media reading (newspapers and magazines)
 - 11 Book reading
 - 12 Book sources
 - 13 Time spent on television

- d) Reading in Classroom and for Homework
 - 14 Reading in language classroom
 - 15 Types of reading across the curriculum
 - 16 Reading for homework
 - 17 Reading assessment
 - 18 Level of students' reading in English

It should be noted that the information on the above items were analysed as data using generally nominal units of measurement. Their frequency distribution is here given in percentages in the order of the foregoing four headings.

7.2.2 Background

They were 86% male. Of the three female members in the sample, only one was from Libya who was a lecturer of an Arabic-medium subject. About 59% of the whole sample were Libyans, most of whom were from the Faculty of Education (English and other relevant departments), while the rest came from predominantly Asian backgrounds mainly teaching in the Vet-medicine Faculty. It is important to note that in the Vet-medicine faculty the scientific subjects were almost entirely taught by foreign staff (8 expatriates versus 1 Libyan), while in the Education Faculty (English and other relevant departments) the syllabus was lectured predominantly by Libyans (12 Libyans versus one expatriate). 50% of the lecturers had spent more than three years in either institution, most of whom were from the Education Faculty. About 45% said they had taught in their subjects for more than three years. The majority of the latter group (60%) were from the Vet-medicine faculty.

Administratively, the lecturers of the pre-veterinary courses belonged to the Faculties of Science and Education (for the latter, mainly the two instructors of Arabic and English) but their course sessions were held in the Vet-medicine Faculty. On the other hand, the lecturers of the first year English courses were appointed by and taught at the Education Faculty (see guidebooks of both institutions for 1980/81).

7.2.3 Reading for Academic Purposes

To assess the lecturers' academic reading habits, they were asked questions about the need to read for their specialist

subjects, what they read, how often they read, and the language(s) used for such reading. Eighty six per cent of the lecturers from both institutions said they had to read in order to prepare their classes in the set courses. 40% read either textbooks or library books only, 27% read both materials (particularly specific library books), and a much smaller proportion (14%) claimed to have read textbooks and professional journals without using library books.

The main differences in reading the various types of reading materials between the lecturers in the two faculties is that Vet-medicine lecturers read more textbooks than their colleagues in the Faculty of Education (English Department): 44% versus 8% respectively. The latter group, however, read almost exclusively library books (e.g., references, owned by and borrowed from a library) considered as their references, while the former group did not use them at all: 46% versus nil. In the interest shown in professional journals, there was no difference between the two groups of lecturers: two members of each group claimed to have used the journals in conjunction with textbooks or without.

Asked how often they read all such materials, a rather high percentage (64%) said 'daily', 18% said 'weekly', and only one lecturer mentioned 'monthly'. The remaining proportion (14%) concerning this item belonged to non-readers. For the 'daily' category, it was shared almost by both groups with the Education Faculty members being slightly ahead in number of their colleagues in the Vet-medicine Faculty (57% versus 43%). Forty two per cent of the whole sample said they read for academic purposes in English, 32% in Arabic, 13% in both or in each coupled with another foreign language. 61% of the English Department

instructors used Arabic for their academic reading (see Table 23 for details), while none of the lecturers in the Vet-medicine faculty read in that language. Obviously, this was owing to the fact that in the latter case the majority of lecturing staff were non-native speakers of Arabic.

Table 23: The Number of the English Department Instructors Reading in Arabic and English

Language of Material	Language of Reader		Row Total
	Arabic	English	
Arabic	08	00	08*
English	04	01	05
Column Total	12	01	13

* Note: These are raw figures.

7.2.4 Reading for Pleasure

Is reading a leisure interest in addition to being an academic activity for our sample of lecturers?

To get relatively enough data about this aspect of the lecturers' reading behaviour, the lecturers were asked several specific questions on the time spent on it and the various newspaper and magazine titles read, the time spent on, number and sources of books read for pleasure, and the time spent on television. Half of the lecturers (50%) read newspapers once or twice a week; 14% read them three or four times a week; another 14% read them every day; and 22% never read any newspaper. On the

subject of which newspaper titles the sample usually read, 45% of the whole sample (almost all were from Education Faculty) said they read the Libyan newspapers, al-Fajer Al-Jadid, il-Jamahiriya, and al-Zahf Al-Akhdar, 27% read only 'other' titles, and another 27% were either non-readers or reluctant respondents. The 'other' titles included several papers in English, Arabic, and Bengali, most of which were read by the non-Libyan staff and obtained from their embassies or by correspondence. Of the English language newspapers, The Times, The Herald Tribune, and The Financial Times, and il-Jamahiriya (English Edition) were mentioned by more than one lecturer.

Compared with newspaper reading, magazine reading is apparently more preferred: 27% of lecturers read them once or twice a week; 59% three or four times a week; and 28% almost all days. Of the named magazine titles, the American news magazine, Time, was most popular with 64% claiming to have read it (most of whom were from the Vet-medicine faculty), while al-Mustakbal (a widely-circulated Arabic news magazine published in France) was mentioned by 18%. More interestingly, however, the 'other magazines' category was even more favourable than these two weeklies because it was chosen by a high proportion of 68%. As expected, magazines issued in English were listed predominantly by Vet-medicine lecturers, whereas those issued in Arabic were mostly cited by lectures of L1 Education Faculty (English Department and others). The most popular of the 'other magazines' were the American news magazine, Newsweek (cited by 33%), followed by two Arabic but non-Libyan cultural weeklies, al-Douha (cited by 22%), and al-Arabi (cited by 13%).

Results on book reading revealed that lecturers were, on the whole, eager book readers. Asked how many books, on average, they read every three months, 5% never read books; 27% read one book; 41% read two books; and 27% read more than two books. For the book sources, four named sources and one 'other' unnamed source were offered to staff for selection in one question. Looking at this item in terms of each source's users and non-users, the data indicated that two named sources were given priorities above others: borrowing from friends and buying from bookshops. Table 24 lists the four choices of book sources and shows their rank order.

Table 24: Rank Order of Book sources as Reported by Lecturers

Rank	Source	Percentage	
First	Borrowing from friends	Yes	59
		No	36
		NA	05
Second	Buying from bookshops	Yes	50
		No	45
		NA	05
Third	Borrowing from university library	Yes	32
		No	64
		NA	04
Fourth	Using 'Other sources'*	Yes	18
		No	77
		NA	05

* Examples reported of 'Other' sources included personal library and the American school library in Tripoli. NA=Not Applicable

Public library did not get any vote from the total sample. The poor ratings of the lending library, whether it is on or off campus, suggests, perhaps, once more (see scores on this aspect

reported by students in section 6.2.3.4) the inability of such reading facilities in Tripoli to cope with the ever increasing demand of our academics for more variety of general and specific publications (see section 3.3.4).

An alternative way of analysing this item on book sources was attempted by the investigator in order to see if its data followed the expected direction. The item's data were regrouped under four categories: 'one source' being the lowest category, 'Two' and 'three' sources, the middle value categories, 'four or more' sources the highest of them all. The assumption behind this classification was that whoever uses a greater number of book sources is likely to be a better and more motivated reader. It was found from this analysis that a high proportion of lecturers, 59%, chose one source (mainly either friends or bookshops), 23% mentioned two sources (again bookshops and friends were together more popular), 14% said three sources, and a tiny proportion, 4% said four or more book sources.

55% of the whole sample said they spent between 5 to more than 6 hours reading non-academic books in a whole week, while 41% spent less than 5 hours on such books. Only one lecturer, 4%, read no books and his reason for that was his 'lack of time' and 'inability to find interesting books'.

With respect to television (generally regarded as a rival to reading), our sample of lecturers appeared to have less interest in it. 77% spent one or two hours watching television, 4% two or three hours, and 18% never viewed any TV programmes. This possibly suggests again the inability of the local television facilities to

attract this type of audience despite its trilingual programmes (in Arabic, English and French).

7.2.5 Use of Reading in Classroom

Now that we have explored the lecturers' personal habits of academic and leisure reading, we turn next to their classroom practice to see if these habits were in any way reflected in their reported practice. To acquire such information, several questions were asked about reading in language classroom, types of reading applied across the curriculum, reading for homework, assessment of reading, and level of students reading in English.

7.2.5.1 Reading in Language Classroom

A question on the degree of importance attached to each of these four language skills (listening, speaking, reading, and writing) was initially intended for EFL staff in both faculties, but because of the small number of these lecturers, it was later decided to re-address it so that it would also include Arabic instructors for non-specialists, e.g., for this study's sample of students. Specifically, the question required every language instructor to indicate the time his course devoted to train his students directly or indirectly on each skill by means of the numbers 1 (most) 2, 3, and 4 (least).

According to Table 25 showing the language lecturers' responses on this item, EFL lecturers seem to agree on relegating listening to a third place of importance in their time scale, while they disagree on where to put the other three skills in that scale. Writing competed with reading on the 'second place' and

speaking was challenged by both skills for the first and fourth positions. Similarly, Arabic lecturers showed a consensus on listening, though here it was understandably committed to a fourth place, almost overwhelmingly decided on reading and writing to be their first and second priorities respectively, but disagreed on the time devoted to speaking. Perhaps this reflects the instructors' theoretical orientation towards the teaching and learning of such skills or their objective for EFL instruction: whether it is reading and writing or speaking and writing which should occupy 1st and 2nd places for EFL students in EFL situations.

Table 25: Time Devoted to the Four Language Skills

<u>EFL Lecturers* N=4</u>				
Subject	Listening	Speaking	Reading	Writing
Composition	3	4	2	1
Comprehension	3	1	2	4
Grammar	3	4	1	2
Grammar[for Prevets]	3	1	4	2
<u>Arabic Lecturers** N= 3</u>				
Arabic A[for 1yr Eng]+	4	1	3	2
Arabic B[for 1yr Eng]	4	2	1	3
Arabic [for Prevets]	4	3	1	2

* Only English language lab instructor was missing from the EFL staff list because he was not available during the research interviews. ** Arabic lecturers= instructors of Arabic for non-specialists + 1yr Eng= first year English specialists

- Figures indicate the time each course instructor devotes to each of the four language skills. 1= most 2= second on time scale 3= third on time scale 4= least

7.2.5.2 Types of Reading

Across the Curriculum

Table 26 shows another comparison being made between the three groups of lecturers in the two faculties involved in this study (divided according to medium of instruction) on seven reading types (or classroom reading activities) adapted from Language for Life (Bullock Report, 1975). Originally, these reading types were presented to lecturers in one item of four-point scale where point 1 indicated the non-use of the activity and point 4 its frequent use. Later, in order to compare the three staff groups on the seven reading types, it was decided that the data collected on each type should be classified into a dichotomy, i.e., a yes-no response, instead of grouping them under a four-point scale.

Regardless of which faculty they belonged to or which language they used for teaching, all groups seem to have exposed their students frequently to instructions written on the chalkboard, with high percentages of 100%, 89%, and 67%. However, Looking at the data in Table 26 in terms of which reading categories (apart from the category "reading instructions from board") were subscribed by above 50% of staff across the curriculum in both institutions, some major differences on the number and content of such categories were found.

In English-medium areas (for 1st year English specialists), lecturers claimed to have habitually required their students to use three reading activities, some of which reflected, perhaps, their linguistic orientation: (1) "following while the lecturer reads"; (2) "reading instructions from worksheet"; and (3) class

intensive reading of short passages". However, their Arabic-medium colleagues teaching the same students, emphasized the category, "reading instructions from textbook". In English-medium areas (for prevet-medicine students), lecturers, on the other hand, seemed to have stressed the category, "reading instructions from worksheet" on which use they were apparently in agreement with their English-medium counterparts in the Faculty of Education.

26
Table 25: A Comparison between Staff Groups on Use of Various Reading Types in Classroom

Reading Type	First Year English Staff				Prevet-Med. Staff			
	English-medium		Arabic-medium		English-medium			
	YES	NO	YES	NO	YES	NO		
Following while lecturer reads	75	25	--	100	--	100		
Reading instructions from board	100	--	67	33	89	11		
Reading instructions from w/sheet	75	25	22	78	56	44		
Reading instructions from t/book	50	50	55	45	22	78		
Personal research in libraries	25	75	33	67	11	89		
Class intensive reading	75	25	--	100	--	100		
Reading to improve reading	25	75	--	100	--	100		
Other	--	100	11	89	--	100		

Notes: w/sheet= worksheet t/book= textbook
Prevet-Med.= Preveterinary-Medicine

If we also compare the RBI observed data cited in the first section of this chapter, with those reported here by lecturers about the use of reading in the classroom, we will find some broad similarities. Students under the same staff groups appear to have been exposed to short instances of reading in both media of instruction in the classroom. Furthermore, in English-medium areas, (for first year English specialists) reading was relatively more practised than in the other areas in both institutions associated with this study (see Tables 21 and 22 of RBI results)

7.2.5.3 Reading for Homework

Four questions were asked about the reading required as part of homework. One item generally asked all lecturers whether they assigned reading passages for homework, another enquired about reasons, if any, for lack of reading in homework, and two items were concerned with sources of text read as part of homework or preparation for examination.

(1) Did the set homeworks involve any reading? If not, why?

According to responses collected, all lecturers of the first year English specialists said that their course assignments required students to read at home, while a slightly smaller proportion, though comparatively very high (78%), of Prevet-medicine lecturers (English-medium) answered the same question positively. Those replying negatively (22%) of the latter group provided different reasons: one (the organic chemistry instructor) said he did not require homework reading because, "reading [was]

difficult for his students"; the other (the EFL instructor) offered this reason, "reading [was] not essential according to [his] course syllabus".

Interestingly, cross-checking the lecturers' replies with those of the students (see Table 12 in section 4.2 on questionnaire results) to this item has revealed comparable results of high validity, particularly the responses of prevet-medicine staff and students. Table 27 below shows the outcome of such a comparison.

Table 27: A Comparison between Lecturers' Responses and Those of Students on the Use of Reading for Homework in both Faculties Involved in the Study

Reading in homework	First Year English I		Prevet-medicine I	
	YES	NO	YES	NO
Lecturers*	100	--	78	22
Students	71	29	79	21

* First year English staff (N=13) were of both media of instruction because they all answered the item positively.

(2) What did you assign for reading in your course?

Table 28 summarizes the responses to this question which was given to all lecturers included in this study. It was a multiple-answer item in which four sources of text read as part of homework were presented for selection: (1) worksheets, (2) course textbooks, (3) general references, and (4) specific references.

Table 28: Sources of Text Read as Part of Homework

Source	First Year English Staff	I	Prevet-medicine Staff
	English-medium N=4	Arabic-medium N=9	English-medium N=9
Worksheets	25	--	11
Textbooks	25	34	23
G. References	--	11	--
S. References	--	22	22
W/T	25	--	22
W/R	25	--	--
T/R	--	33	22
NA	--	--	11

Notes:

Figures indicate the percentage each textual source has got in each group. W/T= worksheet & Textbook W/R= worksheet & references T/R= textbook & references NA=not applicable G.=general S.=specific

If we glance briefly at Table 28 to see how the entries of the four sources across faculties compared with each other, we will find three striking differences. The first difference is the use of textbooks varied from one staff group to another, yet they were used more widely than any other reading material. They had been given a comparatively high percentage (34%) by Arabic-medium lecturers in the Faculty of Education and lower percentages by the other groups (25% and 23%). The second relates to worksheets. It was noted that this textual source had a relatively higher percentage (25%) under the category, first year English staff (English-medium areas), than under the category, prevet-medicine staff (English-medium areas) (11%). Under first year English

(Arabic-medium areas), however, worksheets scored no entry at all. The third difference is concerned with references (general or specific). They seem to feature more prominently under the latter staff group than under the others.

Table 28 also presents figures mentioned by some members of each group of lecturers indicating their use of combinations of such sources of text for homework assignments. These figures reflect the general pattern of each major staff group. The first year English lecturers (for English-medium areas) seem to have commonly prescribed worksheets with either references or textbooks, their Arabic-medium colleagues required textbooks with references only, and the prevet-medicine instructors used all combinations except textbooks with references.

Employing again the cross-checking technique (Oppenheim 1966) to ascertain the validity of some 'factual' data of this item, lecturers' estimates were compared with those of their students reported in the questionnaire on the same item. As a result, some similarities and differences were found (see Table 28). The analysis of English specialists' estimates were based on the major emphases shown by the estimates of these students' instructors. Thus, in Table 28, English specialists' entries for worksheets were astonishingly comparable with those of their English-medium lecturers; while their entries for textbooks and general references were equally parallel to those of their Arabic-medium lecturers. Staff and students' estimates for the other sources or source combinations appeared to be different.

If we look at the same comparison in the Vet-medicine Faculty, we will see that the estimates given by students for

worksheets or worksheets combined with textbooks are higher than those given by their lecturers. But such students' estimates for textbooks or textbooks combined with references are lower than those of their lecturers. Only on general reference, prevet staff and students seem to agree: both said this source was not used as part of homework assignments.

Table 29: A Comparison between Staff and Students on the Use of Textual Sources as Part of Homework

1st Year English	W	T	G.R	S.R	W/T	W/R	T/R
English-Medium areas							
<u>Lecturers</u>	25	25	--	--	25	25	--
<u>Students</u>	25	35	10	03	08	05	08
Arabic-medium areas							
<u>Lecturers</u>	--	34	11	22	--	--	33
<u>Students</u>	25	35	10	03	08	05	08
Prevet-medicine							
English-medium areas							
<u>Lecturers</u>	11	23	--	11	22	--	22
<u>Students</u>	50	06	--	--	37	03	03

Notes:

- Entries of English specialists are repeated under their staff sub-groups groups because they were collected only once for this item covering all the curriculum.
- W=worksheets T=textbooks G.R=general references S.R=special reference W/T=worksheets & textbooks W/R=worksheets & references T/R=textbooks & references

The discrepancies cited here are not necessarily a sign of invalidity, since the item's data were reported by different methods, i.e., by questionnaire and interview. According to Cole and Lunzer (1979, p.144) learners are 'liable to claim [certain answers] especially in replies to [a] questionnaire' despite

precautions taken against any response errors. Furthermore, the students' divergent estimates for each category of the item in question also mentioned earlier in section 6.2.1, increase our doubts as to the complete accuracy of such reported estimates. However, the lecturers' reporting of the 'factual' data of the item concerned may be treated as more credible because their estimates on such item were proven as broadly reliable by internal checking. The lecturers were presented with another version of the same item asking about which of the item's categories (textual sources) could be considered indispensable for students to pass their courses. In reply to this item, the lecturers' estimates generally indicated trends nearly parallel to those shown by the same lecturers' entries cited above in Table 29. The results of the item's second version are depicted in Table 30 where again we have evidence that worksheets are used extensively by English-medium staff, while textbooks and references are used more prominently by Arabic-medium lecturers.

Also, it is possible that the discrepancies are not due to what is used for homework but to differences in attitude towards the textual sources, per se: most importantly towards textbooks versus worksheets. Based on Table 29, many prevet-medicine students mentioned worksheets probably because there is usually informal testing on such texts (in the next section, 7.2.5.5, it is reported that such a testing did exist in the prevet classes). However, a lower number of first year English specialists cited the same textual source (worksheets) probably because it was discussion rather than quizzes that their lecturers used in their

instruction (i.e., there was no checking, so there was no feedback).

Table 30: Sources of Text Read in Preparation for Exam

Source	First Year English Staff		Prevet-medicine Staff	
	English-medium	Arabic-medium	English-medium	
Worksheets	75	22	67	
Textbooks	25	44	11	
G. Reference	--	11	--	
Text/Reference	--	22	22	

7.2.5.4 Reading Assessment

All lecturers were asked the following question: 'What methods do you have for finding out whether or not your students have understood what they have read?'. To indicate their answers to this question, lecturers were given four choices to select from: formal testing, informal testing, discussion, and other method (to be specified by respondent). The lecturers responses on this aspect of instruction show some general patterns. While all lecturers assessed their students' academic reading by both formal testing and discussion, they seemed to differ on the use of each method alone.

Assessing reading by discussion only in first year English classes was mentioned by 33% of Arabic-medium staff and 25% of their English-medium colleagues. In the prevet-medicine classes, however, such method was mentioned by no lecturer. For the

individual use of formal testing, none of the English-medium lecturers teaching first year English specialists reported practising it, while other lecturers across faculties said they did (though with low percentages, 11% and 22%). Informal testing, on the other hand, was cited by prevet lecturers only.

7.2.5.5 Students' Level of Reading

in English

Asked finally if their students read English with fluency or difficulty, all English-medium lecturers in both faculties made it clear that their students could not read English texts with ease. However, their replies about this aspect indicated some variation. A relative majority (43%) said their students read with some difficulty, 36% said with great difficulty, and 21 per cent claimed with little difficulty.

CHAPTER EIGHT

DISCUSSION OF RESULTS

8.1 The Interrelation Between the Cloze and Questionnaire Results

Before discussing the multiple regression findings concerning the relationship between the reading environment (as defined in this study) and the students' reading performance in English and Arabic, a brief account of the conceptual model and the central hypothesis which guided this study is perhaps necessary. The model posits three global constructs which are thought to have an influence on the student's English reading performance (student output):

- 1) Background (or student inputs/home context) as it relates to "accommodation", "father's reading in Arabic/English", "linguistic ability", "age" and "gender";
- 2) Reading Environment as it relates to the five common/global factors identified by factor analysis technique cited in section 6.3.1: "academic English reading practices", "book reading habits and attitudes", "media (or periodicals') reading habits and attitudes", "use of library", and "studiousness";
- 3) "Arabic reading ability" (entered as a distinct student input).

Such conceptualization led to the three component model shown in Figure I (also referred to in section 4.1), which depicts

a background path, a reading environmental path and an Arabic reading ability path to English reading performance. Further, the paths of both background and reading environment were shown leading to Arabic reading ability (now entered as a student output). This model was not offered as representing a strict causality. Rather it was given to serve as a convenient theoretical structure representing associations which were thought to be the above variables connected with the three global constructs of the model. The rest of the factors might be other contextual/individual factors (residual variables) which were not accounted for in the present study for practical reasons.

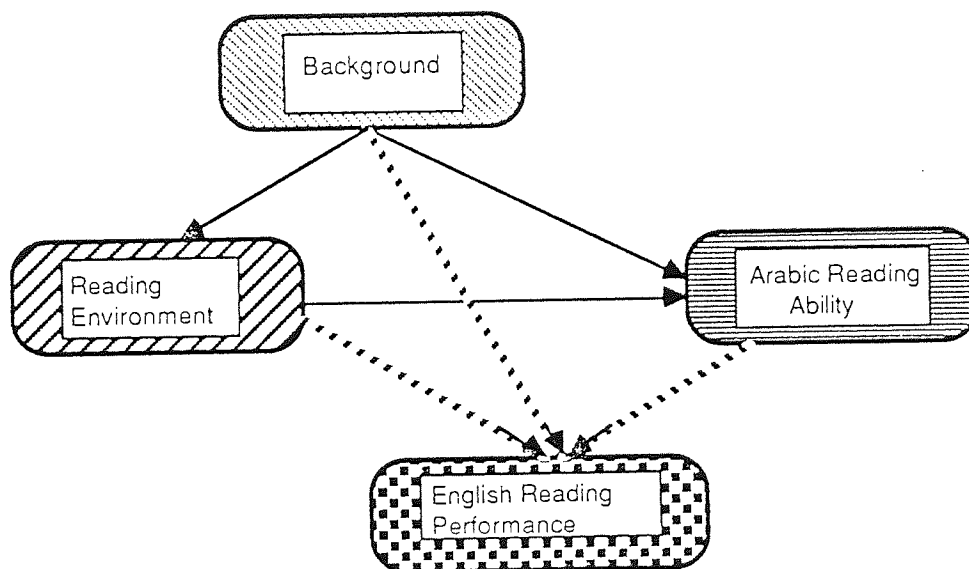


FIGURE 1 :
THE CONCEPTUAL MODEL ADAPTED FOR
THE STUDY

8.1.1 'English' Regression Findings

This model is based on the central hypothesis that the socio-educational reading environment (as reported by the preliminary-year Libyan undergraduates of Al-Fateh University and identified by this study) was significantly related to the latter's English reading performance (as assessed by cloze procedure). According to the results of the two multiple regression analyses (one for first year English specialists [hereafter 'English' sub-sample], and one for the combined 'Medicine' group [hereafter 'Medicine' sub-sample]), it was found that this hypothesis is acceptable within the context of this investigation. The three global constructs of the conceptual model were collectively found significant in accounting for the variance of the English cloze scores of both samples (43%, $p < .01$ for the 'English' sub-sample; 48%, $p < .002$ for the 'Medicine' sub-sample).

Looking at the influence of these constructs in detail, we find that "academic English reading practices", "reading various magazines", and "Arabic reading ability" all are the most effective factors related to English reading performance in the same way for both major samples. However, very different patterns of predictor variables appear in each sample. Among the 'English' sub-sample, in addition to the above common factors, "media reading habits and attitudes" and the "background variables" taken as a group are important. Among the 'Medicine' sub-sample, "father's Arabic reading", "place of study", "use of library", "ways of reading" and "book reading habits and attitudes" are important additional predictors of English reading performance.

8.1.1.1 Interpretation of

Similar Findings

To interpret these findings, let us first discuss the similarities among the two samples. Those factors which are significant predictors in both samples will be referred to as the "common predictors". The size of the beta weights for these common predictors (see sections 6.4.1.2.1 and 6.4.1.2.2) suggests overall, that students who reported use of dictionary (employing slightly more of monolingual dictionary than bilingual dictionary) and students who reported having relatively fewer problems of academic reading such as 'much reading matter', 'difficulty in understanding English texts', etc., tended to obtain relatively higher English reading performance scores. In the same vein, students who read various magazines and did well on the Arabic reading test tended to be better English cloze performers. Conversely, the beta weights of "academic English reading practices", "reading various magazines", and "Arabic reading ability" suggest that those who obtained low scores on English cloze tests tended to show poor uses of academic reading and magazine reading and manifest poor performance on the Arabic reading test.

These results are all in the anticipated direction. They appear to be in line with those of other studies concerned with academic study or reading in L1/EFL. On problems of academic reading, Sen (1970, p.59), for example, found in her extensive study carried out in Britain that 'the Middle Eastern students' who obtained lower scores than the other nationalities in the Davis test 'on the whole seem to find most difficulty with their

studies. Only few expressed no difficulty with lectures, tutorials and in contacting their teachers, and a high proportion found writing essays and reference reading "very difficult". On the use of dictionary, Williams (1981, p.44) whose work was cited in section 2.5.3, found that 'there was evidence of a strong relationship between availability and use of English dictionary and the various measures of reading performance'. Bensoussan et al. (1984) reporting the results of their three studies on the use of monolingual and bilingual dictionaries concluded that 'better students in EFL reading tests preferred monolingual dictionaries' and that 'less proficient students [in the same tests]' were found to be 'users of bilingual dictionaries' (p.271).

The common predictor, "reading various magazines", suggests a definite relationship between reading habit (or leisure reading as defined here) and reading ability. More interestingly, the finding also indicates an association between Arabic (or L1) leisure reading and English (or L2) reading ability. The whole sample's responses to student questionnaire showed that as many as 60% of the subjects claimed to read one magazine title which was one of three non-Libyan Arabic magazines: Kul Al-Arab (on general Arab politics), al-Nahda (on women), and Nadeen (of the "sensational" type). Such findings generally do not support those of Lamme (1974), quoted in section 2.4, which reported no strong association between L1 reading habits and L1 reading ability. This might be due to her use of the inappropriate simple measure, Pearson correlation, to explain the habit-ability relationship and to the focus on book reading habits only.

The present findings, however, seem to agree with the results of the 15+ children's reading survey conducted by the Warwickshire branch of NATE (1968, mentioned in D'Arcy 1973) and those of Douglas (1976). Both of such findings admittedly are not directly comparable with our results (e.g., no multi-variate analysis was used), but their resemblance to ours is promising: they indicate the existence of such relationship, particularly concerning magazine reading. The NATE study found that 'a large number of [poor achievement] pupils read no comics/magazines' while good achievement pupils 'read magazines of...educational or adult type together with "the teenage magazines"' (p.58). Douglas, whose study is also cited in section 2.4.4, and who classified subjects into 'high' and 'low' reading groups (based on their performance on an English cloze test), observed that the high group 'claimed to read at least one magazine a month' (p.137).

The present data on the common predictor, "reading various Arabic magazines" coupled with that of the third common predictor, "Arabic reading ability", suggest even further the importance of L1 reading for reading in L2/FL. Several recent studies (e.g., Al-Rufai 1976, Baltra 1983, see also Alderson's 1984 review, and Levine and Reves, 1985) have provided evidence substantiating the above suggestion and confirming the occurrence of a relationship between the two reading abilities. Al-Rufai's research, for example, proves this point specifically with respect to Arabic-English reading skills relationship. In 1969, she assessed the reading performance of 574 Iraqi students from 5 colleges of Baghdad University by giving them six reading comprehension tests consisted of 'two parallel versions, one English and another in

Arabic'. Her findings concluded that 'the relationship between the total scores of the two versions of the tests was highly significant' (p.237). In the academic year, 1970-71, Al-Rufai made another similar experiment on a smaller scale at the same university in which she confirmed her earlier results, i.e., reading skills and habits 'are transferable from one language to another' (p.239). Although the above finding of the present study is again admittedly not based on testing procedures nor focus of similar dimensions as those of Al-Rufai, the broad agreement between both findings seem to lead in more or less the same direction.

8.1.1.2 Interpretation of Different Findings

As stated earlier, these three common predictors do not operate alone in each major sample; rather they act in combination with other environmental/individual predictors which are different among each sample and together account for the variance in the reading scores. To explain why each of the other predictors does or does not have an additional strong influence on the English reading scores of this sample or the other, let us discuss them each separately.

8.1.1.2.1 The 'English' Sub-sample

8.1.1.2.1.1 "Media Reading Habits and Attitudes"

According to multiple regression analyses, this variable contributes significantly to the prediction of reading performance among the 'English' sub-sample but does not do so among the

combined 'Medicine' sub-sample (beta weights= -0.25 versus 0.10 respectively). Its negative relationship to the reading scores of the 'English' sub-sample suggests that there is an association between low scoring in the cloze test and more hours spent on reading the periodicals, especially Arabic newspapers. This result seems to support that of Douglas (1975, p.122) who found that the low scoring group in his Botswana study 'spent more time on magazines and newspapers [in the three-day category given as a one reading period to talk about in the interview]' than the high group. Douglas, nevertheless, did not find the difference between the scoring groups to be 'significantly great' nor did he get a consistent response when he asked his sample about their magazine reading per month. He thought this was perhaps due to a reliability problem with his interview schedule and suggested further investigation of this matter to see if it is real or not.

But why does the media factor appear to be more important among the 'English' sub-sample than among the combined 'Medicine' sub-sample? One possible answer to this question is based on a statistical ground. Examination of the direction and magnitude of the various predictors, using the size of beta weight as a criterion, indicates that among the 'English' sub-sample the effect of "Arabic reading ability", which is a distinctive major construct of this study, is so great (beta= .34) that only "academic English reading practices", "media reading habits and attitudes" and "reading various magazines" have any further predictive power in terms of the reading environment. Among the combined 'Medicine' sub-sample, on the other hand, "Arabic reading ability" has relatively less importance (beta=0.28) as it shares

the influence on the variance of English cloze scores with several other environmental predictors, reaching statistical significance. The most important of these predictors are "academic reading practices" and "book reading habits and attitudes". It is quite reasonable to expect "Arabic reading ability" to be relatively more significant among the 'English' sub-sample than among the combined 'Medicine' sub-sample because the former comes from the Arts' stream where Arabic, though being a twin medium of instruction alongside English, has longer hours and more subjects (areas) allocated for it in the first year of English major than has Arabic at premed or prevet majors (see sections 3.2.3.8 and 7.1.1).

A second possible statistical answer to the above question would be that, although the difference between the high and low scoring groups on the English cloze test within each sample was found statistically non-significant by chi-square (using the median as a criterion for scoring group division), the scoring groups of the 'English' sub-sample showed relatively more variation on the media factor than their counterparts of the 'Medicine' sub-sample. The 'English' sub-sample's low reading group reported that they read particularly more newspapers than the same sample's high reading group (81% versus 56%). Despite its statistical insignificance (which is perhaps due to the relatively small size of each scoring group and its large tables used for chi-square, see Johnson, 1977, pp. 232-3), this might again help to account for the negative beta weight assigned to the media factor among the 'English' sub-sample by the multiple regression analysis.

As ancillary findings related to the difference between both samples on the media factor, consider, for example, responses to the student questionnaire with respect to the type (as opposed to the number or frequency of use) of newspapers and magazines which the student claimed to have read regularly. The crosstabulation of such responses indicated that while both samples were nearly identical in their responses to the use of periodicals of general/educational type, a significant difference was shown between them, especially with respect to al-Reyada al-Jamahirya (a sport newspaper) and al-Nahda (a women's magazine). 11% of the 'English' sub-sample said they read al-Reyada al-Jamahirya compared with 89% of the 'Medicine' sub-sample who reported reading the newspaper ($p < .00$). 62% of the 'English' sub-sample claimed to read al-Nahda, while 38% of the 'Medicine' sub-sample said they did ($p < .04$). If we tie these findings with the fact that the 'English' sub-sample had an overwhelming majority of females (93%) and the 'Medicine' sub-sample had as many as (72%) of males ($p < .002$), we will see that the above media interest of each sample seems to be dictated by the distinctly different gender structure of each group. The male students opted for the sport newspaper, while their female colleagues preferred the women's magazine. These findings may support those of the NATE survey (1968, see D'Arcy 1973, pp.58-9) and Heather (1981). In her study of the leisure reading of 13-15 year olds in Britain, Heather found that boys mainly preferred sports and hobbies magazines and girls mainly teenage magazines. She also observed that this sex difference in reading periodicals was a perpetuation 'of the stereotypes of male and female behaviour...' (p.82).

8.1.1.2.1.2 "Background Variables"

Although none of the measures of the background construct among the 'English' sub-sample reached statistical significance (only their combined effect did, R-squared=0.25%), it was possible to assess the relative importance of such measures by the increase in R-squared. It was found that the addition of "father's reading in English", "age" and "linguistic ability" to the regression equation containing the other three background variables, "gender", "father's Arabic reading" and "accommodation", resulted in a change in R-squared of 21%. Obviously, this shows the former background variables as being more effective than the latter ones in accounting for the variation of the English reading scores of the 'English' sub-sample.

To explain also why such distinct variables were more important among the 'English' sub-sample and not among the 'Medicine' sub-sample, each one was crosstabulated by sample. It was found that (57%) of the 'English' sub-sample said that their fathers read in English compared with (40%) of the 'Medicine' sub-sample ($p < .05$). Further revealed was that the age range of the English students was relatively larger (17-25 year olds or 8) than that of the 'Medicine' students (17-21 year olds or 4), though the difference was not significant by chi-square. Regarding "linguistic ability", the analysis indicated that as many as 58% of the 'English' sub-sample reported that they knew two languages while 42% of the 'Medicine' sub-sample said so ($p < .03$).

Claiming to know more than one language and having a father who can read in English gives a plausible combination for a sample

specializing in a foreign language (EFL) who is expected to be interested in languages or probably in anything connected with language use and perhaps motivated by a home environment that uses or knows how to use the FL in question. Thus, according to the results of the regression model of the 'English' sub-sample, 'good' readers in English tended to be students whose fathers were literate, particularly in English (see Williams, 1981, p.47 supporting this point), who knew more than one language, were relatively older than the mean age of 18 (see section 6.2.3.1) read magazines (but not newspapers), were able to read or understand Arabic texts well, had fewer problems of academic reading and used the dictionary with a slightly more emphasis on the monolingual one (i.e., the English dictionary).

8.1.1.2.2 The Combined 'Medicine' Sub-sample

8.1.1.2.2.1 "Book Reading Habits and Attitudes"

The positive-signed beta weight for this predictor is primarily important among the 'Medicine' sub-sample: it is (0.25) greater than among the 'English' sub-sample (.02), generating an increase in the R-squared of 05%. A possible clue to this difference is perhaps found in the results of the student questionnaire concerning the items under the book factor. It was shown that although both samples were nearly identical in reporting the amount of books each said that they usually read for pleasure in three months, and the book sources they used, the 'Medicine' group spent more time, they said, on books than the 'English' sub-sample ($p < .002$). Moreover, examination of the high and low reading groups within each major sample (based on each

one's cloze scores) in relation to the book reading factor indicated that responses of both scoring groups of the 'English' sub-sample were identical while those of their 'Medicine' counterparts were not, though the differences were not statistically significant. Among the 'Medicine' sub-sample, in 16 out of 32 cases, the high group spent 3+ hours weekly on books compared with 6 out of 30 low group cases. Greeney (1980) reached a similar conclusion: 'those who obtain low scores on reading attainment tend to devote relatively little time to book reading or comic reading' (p.354).

In addition to the difference between both samples on time spent on books, there was another difference between them in the proportion of their reluctant book readers: the student questionnaire data showed that there were more non-readers among the 'English' sub-sample (37%) than among the 'Medicine' sub-sample (20%) -- $p < .002$. Asked why they did not read books for pleasure, the English-major non-readers said it was mainly because of lack of time, while their 'Medicine'-major counterparts said it was mainly due to the lack of interesting books. The 'lack of time for leisure reading' excuse of the former group was further probed by looking into the difference between females and males of the whole sample in the time spent doing homework assignments. It was found that more females (56%) spent 3+ hours per week on academic assignments than males (41%) -- $p < .05$. Since the majority of the whole sample's females were first year English specialists (75%) compared with 25% who were preliminary-year medical female students, we can then infer that the difference seems to be in favour of the 'English' sub-sample with respect to homework time

-- hence perhaps there was the claim of 'the lack of time for leisure book-reading' among a good number of the latter students.

Incidentally, this difference between both major samples in terms of gender was also observed in the item concerning book types read for pleasure as their first choice. The 'Medicine' sub-sample mainly cited books on science and sport, and the 'English' sub-sample mainly read stories and books on social problems (i.e., non-fiction books, e.g., on marriage, baby care, family relations, etc.) ($p < .01$). This finding appears to fit in with what we have already reported about the sex difference between both samples in connection with reading certain types of media and to be broadly in line with Heather's (1981) survey result in which she found boys avoiding romance fiction (the preference of girls) and reading science fiction. Heather thought that the boys' choice was 'in keeping with what the role they are expected to fulfil in society of being unemotional and more concerned with impersonal rather than personal issues' (p.94). For Libyan boys or young men, it may be similarly true that they can be relatively less emotional than their female counterparts, but they may be as equally involved in personal issues as girls and young women.

8.1.1.2.2.2 "Library Use"

Similar to the two environmental predictors among the 'Medicine' sub-sample, "place of study", and "ways of reading" (mentioned below), this factor has a significant but negative-signed beta weight which is to be interpreted in the light of numerical values assigned in coding the questionnaire data. Lower numerical value was given to the response indicating the non-usage

of library. Crosstabulation of this factor by sample revealed that there were more non-users of the lending library among the 'Medicine' sub-sample (73%) than among the 'English' sub-sample (42%) -- $p < .002$. When asked about their non-usage of the library, the 'Medicine' sub-sample gave reasons some of which were related to time. For example, one student said, 'the loan period is so short that I cannot finish translating on time the difficult words found in the English library books'. Library-users also cited this problem. Several students said that there were no interesting books in Arabic at the lending library and that the English library books were too difficult to understand. Other students said that they did not have to go to the library because they could buy books from bookshops or borrow them from friends. One Medical student said, 'book-borrowing is done at the library of the Science Faculty which has science books in Arabic offered on loan only for its own students'.

From these reasons we may conclude that apart from the difficulty of processing English texts, which according to the whole sample's questionnaire responses was a problem common to both samples, it is evident that the shortcomings of the lending library or the restrictions which it imposed, e.g., short loan periods, and lack of interesting books were problems to be blamed on the library rather than on the students.

Furthermore, from an informal and short encounter with the librarians of the faculties involved in the present investigation the researcher was able to know and confirm that while the Education library allowed its preparatory-year students to borrow books, though for a very short period (see section 6.2.3.4), none

of the other two libraries of Medicine and Veterinary-Medicine did so (only first years could borrow books at the latter libraries). This was because none of the medical libraries stocked any 'required' book for preparatory-year students whose syllabuses were laid down not by their respective faculties but by the Faculties of Science and Education (see also section 3.2.3.9 on this point).

Under such circumstances, no wonder why the majority of the 'Medicine' sub-sample were non-users of the lending library at the university. The fact that this matter affected their scores on the English cloze test suggests that English reading performance was relatively good by those students who used book sources, e.g., friends and bookshops, other than the lending library which had the above problems and no place for them. This seems to support broadly Douglas's (1976) finding which indicated that the high group tended to use more sources [of reading material] outside of school' such as 'buying in shops...' 'than did the low group [who] used the school library for books' (p.124).

8.1.1.2.2.3 "Place of Study"

Among the 'Medicine' sub-sample, this contextual variable had a relatively high but negative beta weight (-0.26); it thus occupied the fourth position after "academic English reading practices", "Arabic reading ability" and "book reading habits and attitudes" which all contributed to the variation of the English cloze scores. It suggests that relatively high scorers on the English reading test were those who studied privately in one place, particularly at home or in hostel. Such a finding was

contrary to the researcher's expectation (and the result of Douglas, 1977, p.104) that whoever used more than one place for study would be a 'good' reader/achiever. The present finding, however, seems to fit in broadly with Mann's (1974) argument which states that, '...students do not need to be in a library at all to be doing private study. A student with the appropriate books in his possession, either borrowed or bought may well prefer to work in his own room rather than in a library' (p.125). It also explains perhaps the foregoing finding about the non-usage of the lending library by a majority of the 'Medicine' sub-sample.

In fact, most members of both samples reported in their responses to the item on "place of study" that they used the home, be it on or off campus, for private study. The only difference between them, however, was that there was much higher variation of responses on this item among the 'Medicine' sub-sample (77%) than among their English counterpart (91%) — $p < .03$. This significant difference favouring the 'Medicine' sub-sample was probably the reason for the variable "place of study" to be relatively more important among the latter group than among the 'English' sub-sample.

At least in the case of our sub-samples, staying at home does not seem to clash with a supposedly 'anti-social' activity such as private reading/study which generally requires a quiet atmosphere — a precondition which the home in communal societies of large/extended families like Libya is not expected to fulfil (see, for example, Bengt, 1979, p.105). Support of the present finding may be indirectly found in the other student questionnaire outcome, 'no opposition between watching television, a so-called

domestic 'noisy' distractor, and doing homework' (see the results of factor analysis in section 6.3.1), and directly in Attir's (1979, pp.52-53) conclusion which also reported that the majority of his Libyan sample did their leisure reading at home. Further research may be helpful to discover in detail how far such a combination, namely, the home and reading/studying, exists, particularly in cultures like that of Libya.

8.1.1.2.2.4 "Ways of Reading"

This variable is an additional predictor of English reading performance of the 'Medicine' sub-sample because its beta weight among the latter students was relatively larger and hence more statistically significant (-0.22) than among the 'English' sub-sample (0.13), and because responses to its questionnaire item had a higher variation among the 'Medicine' sub-sample than among their English counterparts, though this difference just failed to reach statistical significance ($p < 0.10$). Crosstabulation revealed that 61% of the 'Medicine' sub-sample said that they employed 'one way of reading' compared with 76% of the 'English' sub-sample. For the use of 'two or more' reading strategies, 40% of the Medical students said 'yes' as opposed to 24% of the English students.

The negative-signed beta weight of the variable "Ways of Reading" suggests, as hinted earlier, that the lower numerical value assigned in coding the variable was given to the category, 'one way of reading' (i.e., to an inflexible reading style) which, according to literature (e.g. Walker, 1974, p.10; Harrison and Gardner, 1977, pp.84-94; Nuttall, 1982, p.23), is a characteristic of inefficient readers. Thus, it appears that many of the

'Medicine' students who reported resorting to only a single reading strategy, regardless of their purpose in reading, obtained low scores on their English reading test. As far as academic reading was concerned, this finding may also and indirectly suggest that the instructors of the 'Medicine' sub-sample neither required them to read extensively nor gave them chapter tests regularly. These are two activities involving, perhaps, various reading demands which if the students had been exposed to, they might have reported using or practising a flexible way of reading to cope with them (see Paris, Lipson and Wixon 1983, p.311).

Data from various instruments of the present investigation seem to support indirectly this interpretation. Homework assignments for the 'Medicine' sub-sample did not include any list of references for extensive academic reading. Instead, worksheets and/or textbooks reportedly were the main textual sources (see sections 6.2.3.5 and 7.2.5) from which only sections (or passages) were selected for homework assignments. Although it probably seems not unreasonable for 'doing' disciplines (where the chalkboard and note-pade are relatively more basic than books — see Mann, 1974) such as the ones used in this investigation, Medicine and Veterinary Medicine, to have relatively less or no use of reference books and especially for their preliminary-year students, the evidence from the same present data indirectly shows that even these students' required reading at home appeared to be rather too problematic for the students to help them develop adequate learning strategies in the L2/FL. This is inferred from the fact that the above textual sources or material used by the 'Medicine' sub-sample for homework were in authentic English and

hence proved to be difficult to understand as indicated by several measures, namely: by the students' responses to the questionnaire items, e.g., on problems of academic reading, and use of the lending library and dictionary; (i.e., bilingual dictionary), by their lecturers' responses (albeit mainly about prevets -- see section 7.2.5.5); and by the Flesch readability formula (see 4.3.2.4). It is equally inferred from the data of the staff interviews and classroom observation which all indicated that no reading improvement exercises were given to the students. According to Nuttall (1982, p.32) difficult authentic material for FL learners may lead to the use of translation -- 'the only way of coping', and this in turn may result in slow independence in reading and in the interposition of the L1. Free student comments on the item, 'problems of academic reading' did, in fact, confirm Nuttall's argument. One student, for example, said, 'I use translation to understand English texts which are both difficult for me and the whole process takes much of my time'.

As regards whether formal chapter tests were used also as a teaching practice for developing flexible reading strategies, the data of staff interviews on this matter reported that only a low proportion of prevet lecturers (22%) said that they adopted such a practice (see section 7.2.5.4, Table 30).

8.1.1.2.2.5 "Father's Arabic Reading"

This is the last additional predictor variable among the 'Medicine' sub-sample with a negative-signed beta weight (-.21) which is not found as statistically significant among the 'English' sub-sample. Again, this might be due to the high

variation of the 'Medicine' sub-sample's responses about this variable compared with that of the 'English' sub-sample. 94% of the latter group said that their fathers could read in Arabic while 88% of the former group said so. However, this difference was not found significant. The negative beta suggests that students whose fathers were able to read in Arabic had low scores on their English reading test.

If we consider many of the research findings (e.g., Cowan and Sarmad, 1976, p.375; Elley, 1984, p.292) which show the effect of parents' literacy on their children's reading habits or ability, the present result will seem a reasonable expectation: here we have fathers who can only read in the mother tongue (i.e., Arabic) but not in the language of their children's instruction (i.e., English). Furthermore, the present finding and that of the 'English' sub-sample, cited above under "background variables", thus support, on the whole, the view held by writers like Williams (1981, p.47) which argues that improvement of reading performance depends on whether the language of instruction is or is not 'reinforced outside of the classroom'. Obviously, both background predictors concerning the father's reading in Arabic and/or in English still require further investigation as to whether father's ability to read in the L1/L2 in societies like that of Libya also means necessarily father's actual habitual reading. Also, the question of whether the students live at home or away from home might be significant.

To summarize the regression findings of the 'Medicine' sub-sample discussed above, 'good' readers in English tended to be

those who devoted relatively large time to book-reading, used book sources outside the University library, studied privately at home or in their own hostel rooms, read magazines, did well in their Arabic reading test and had less problems of academic reading. By reverse implication, the 'not so good' readers in English tended to show the opposite of such characteristics plus two more features: 1) their fathers were only literate in Arabic; and 2) their reading style was inflexible.

As a final comment on the different regression findings, the variations in the size of the beta weights between the two samples may be connected with variations in the homogeneity of the samples with respect to the various predictors. The 'English' sub-sample is relatively more homogeneous than the combined 'Medicine' sub-sample who consisted of two groups of students from different faculties, hence two different fields of study, with one (pre-veterinary Medical students) having a predominant majority of males while the other (premedical students) having a mixture of both sexes. The 'English' sub-sample, on the other hand, were all from one higher institution, the Education Faculty (English Department), and were predominantly females. These differences reflect the actual population structures of such sub-samples, particularly in terms of gender (see sections 3.2.3.7 and 3.2.3.9 respectively for documentary evidence on this point). To have tried to redress the imbalance of sexes would have given a false picture. Perhaps because of its polarization in both samples, gender did not emerge as an important predictor (or unique contributor) of the English cloze scores. However, in the subsequent brief discussion of the 'Arabic' regression model for

the whole sample (where "Arabic reading ability" is a dependent variable) "gender" was a significant factor affecting the variation of Arabic cloze scores.

In addition to the general statistical consideration (the degree of the sample's homogeneity) explaining the different regression results, the above discussion referred indirectly to another 'contextual' consideration (the difference in the major field of study) as perhaps an alternative explanation of some of the same results. For example, it was hinted that the emergence of "library use", "ways of reading" (with negative beta weights) and "book reading" (with positive beta weight) among the 'Medicine' sub-sample were probably due to inaccessibility of the lending library, lack of extended reading material for homework assignment, and to requirement of short authentic English texts respectively. Perhaps these academic environmental constraints of the preliminary-year curricula/instruction practices of the medical faculties involved in the study, led the 'Medicine' sub-sample to seek reading relevant or interesting material through other channels (bookshops or friends), learn an inflexible reading strategy, relatively find ample time for leisure book-reading in Arabic and resort to translation and memorization to overcome English difficulty. By contrast, it was hinted that the 'English' sub-sample claimed, for example, to have relatively less time for leisure-book reading and to use the library (which was reported as accessible to them) probably because of the fact that they were required to read more textbooks and references in Arabic in their homework assignments. Thus, certain predictors of reading ability found in the study seem to vary according to the inevitable

variation of the samples' homogeneity and/or the academic requirements in each of the major samples' institutions. If the latter consideration (the academic constraints) was to be associated with some of the different findings, then this would mean that different circumstances might produce different good readers/learners.

Apart from the differences in gender and field of study, both samples were, however, identical in several other aspects, the most important of which were: their use of English as a medium of instruction, and of Arabic as a medium of 'shared reading habits'-- to use Douglas's (1977, p.61) expression, their educational level (both were preliminary-year undergraduates of the same university), and in their average age (18+).

8.2 General Impressions

The foregoing discussion of findings was based chiefly on the statistical interpretation of this study's multiple regression models which involved and indicated an association between certain reading environmental/individual variables and English reading performance of the 'English' and 'Medicine' sub-samples. An alternative non-statistical but objective explanation of this study's findings was also attempted by drawing general impressions from the present data which have a bearing on the main hypothesis of this thesis. In so doing, we have looked into the conclusions of each research instrument involved in this study separately and then made our overall comments on such conclusions in terms of their inferred interrelationship .

8.2.1 English Reading Test Conclusions

According to the results of the English reading tests of both major samples involved in this research work, neither group reached the independent reading level which was supposedly the reading standard of University students, even of those beginning undergraduates among them. This finding was concluded from the results of each sub-sample and judged cautiously by the cut-off points for interpreting cloze results (we say cautiously because the determination of the following criterion levels based on such points is held as "rather an approximation"--see Foley, 1983, p.67). 59% of the 'English' sub-sample (N=59) scored below a mean of 36 (putting them at the 'frustrational level'); 45% (nearly half) of the 'Medicine' sub-sample (N=66) scored a mean of 44 (placing them at 'the instructional level'-- see Betts, 1954 for an early account on these reading levels which according to Foley (ibid., p.63) seem to be applicable to both native and non-native speakers of a language). Other measures of central tendency (e.g., the mode--which might be more appropriate to mention here because of the skewness of scores) also confirmed the general low reading performance of both samples (despite the obvious difference between them discussed elsewhere -- see section 5.1): the mode for the 'English' sub-sample's scores was 26% and that of the 'Medicine' sub-sample was 48%. The above conclusion was also reached despite the fact that aspects of information about the validity and reliability of the English-medium cloze tests had been duly observed and indicated in this investigation (see sections 4.3.2.4 and 5.1 respectively).

8.2.2 The Student Questionnaire Conclusions

If we examine the whole sample's responses to the student questionnaire, particularly those concerning items of academic reading, we will see indications of 'not so good' uses of the academic reading environment. Detailed analysis revealed that a great many of the students (84%) indicated that they encountered difficulties with the use of library. As many as 73% indicated that they had problems of academic reading such as finding English textbooks hard to understand. A similar proportion of students (73%) did not use an English dictionary (a monolingual one) while a predominant majority (91%) consulted a bilingual dictionary (English-Arabic). A high number of students (68%) indicated that they employed one inflexible way of reading and nearly half (47%) resorted to memorization as a learning strategy.

Whilst 40% of students said that they read their textbooks because of their tutor's requirements/recommendations (i.e., not by their own initiatives), over half (55%) said that they depended on the tutor's handouts to pass their exams. Asked why they did so, the latter group provided comments suggesting a kind of 'cue-seeking' behaviour ('the seeking of short cuts to academic success') which writers like Wilson (1981, p.54), reviewing the literature on this point, reported as being the one that is likely to 'produce work which has the appearance of scholarly performance without substance'. One student, for example, said, 'I rely on tutor's handouts because examinations are based on them'. Another student said, 'the tutor's handouts contain a lot of important observations which he usually mentions during his lectures'. A third student commented, 'the tutor's handouts are brief and

simple'. The staff interview data also confirm this finding about the 'students' dependence on tutor's handouts to pass their exams': 75% of the English-medium instructors of the 'English' sub-sample mentioned this fact; 67% of their Veterinary-Medicine counterparts reported it as well.

Contrary to the above kind of reading, the reported leisure reading of the students, in general, was apparently extensive but largely in the mother tongue (Arabic). Nearly half (47%) said that they read in Arabic, while 42% said that they read in both English and Arabic. However, closer examination of the latter's claim, using an internal checking procedure (see Oppenheim, 1966, p.71) revealed a negligible number of students (between one to three of the whole sample) who indicated that they read English-medium books or periodicals for pleasure. The predominant majority, on the other hand, were found to read such leisure reading material, most of which were 'named titles', in Arabic only. Taken as a whole, this finding suggests that there was no reinforcement of the major language of instruction (English) coming from the leisure reading behaviour of our whole sample. This might be due to: 1) the students' inability to read extended texts in English as has been alluded to earlier; 2) the lack of interesting publications in English (this might be true about books but not about periodicals which were reported to be in adequate amount and variety (see section 3.3.2); and/or 3) the students' conscious classification of preferable language use, namely, Arabic for leisure (or personal) reading and English for academic study--this speculation obviously requires another investigation to see to what extent it is real.

Also, the findings alluded to already about the students' use of an inflexible reading style and memorization as learning strategy suggest that despite the students' reported extensive leisure reading in Arabic, their academic reading in English, on the whole, did not seem to benefit generally from the Arabic reading experience. This in turn might even imply that the students did not effectively use their Arabic reading for pleasure. Because this investigation did not pay specific attention to this point, another closer look at it might shed more light for example on how actually Arab (or Libyan) students have read their Arabic texts (i.e., finding out about their approaches to reading in the L1) by using analyses other than cloze tests, e.g., one-to-one read and answer technique where a selected challenging text and an interview are employed (see Wilson, 1981, p.115).

8.2.3 The Staff Interview Conclusions

To see if the teaching staff did value reading, they were asked about their reading habits and how they used reading in the classroom and for homework. On the whole, the lecturers of both media of instruction (English/Arabic) seemed to project a favourable picture of themselves as being good readers in the two spheres of reading under consideration, namely, academic and leisure reading. However, the overall trend of their reading was that they were predominantly (67%) more textbook readers than professional journal readers (14%); and that they were relatively more magazine readers (59% of them read magazines for 3-4 hours/week) than newspaper or leisure book readers. Further

examination of the latter point showed that the majority of Libyan staff (45%), regardless of their language of instruction or faculty, tended to read such material in Arabic while a smaller number (27%) of their non-Libyan colleagues read for pleasure in English or in their mother tongues (e.g. Bengali). The rest were reluctant readers.

Another conclusion revealed by the staff interviews was the fact that neither the lending library nor television were reported as the staff's favourite free time pre-occupations. This suggests that there might be a lack of interesting and updated books, etc. in the former (which responses to student questionnaire seemed to support) and a failure of local television (despite its trilingual programmes) to appeal to the academics regardless of their language or origin. Borrowing from the lending library by staff (specifically by Arabic-medium lecturers) seemed, however, to be confined to required reading and during term time. This was indirectly concluded from their responses to the item on reading material read for academic purposes.

Whether the staff also showed indirectly favourable attitude towards reading in class and for homework or trained students in reading, their responses generally did not appear to indicate that this was happening according to expectations. For example, EFL instructors (of both faculties in the study) were apparently uncertain as to where to place reading in their time-scale (though most of their Arabic-medium colleagues gave reading their first priority). The staff interview data also reported that there were no courses offered for intensive reading nor for reading improvement for preveterinary-medical students. Of course, these

types of reading may not be expected to be the direct responsibility of the non-language subject-specialist (though their cooperation is hoped for), yet it is certainly that of the EFL instructor in the first place in the Faculty of Veterinary Medicine (and indeed in other English-medium faculties as well).

However, when the EFL instructor was asked why he did not involve any reading in his students' homework assignments, his reply was that, 'reading [was] not essential according to [his] course syllabus'. To him, what was essential to teach was basic 'grammatical knowledge' which the students', in his own words 'seemed to have not yet absorbed sufficiently despite six years of pre-university English language learning'. If this answer was to be taken for granted, one would then wonder, first, why English-medium preliminary-year students (particularly those in "technical" faculties) were supposed to read textbooks and worksheets in authentic English; second, why the libraries at Al-Fateh University had to stock many academic books in authentic English as well; and finally why most of the students' free comments on the problems of English academic reading mentioned, among other things, the problem of vocabulary and not of grammar which probably suggest that they had more of a reading rather than a language problem per se. Examples of such comments (translated from Arabic) were:

'There are many words which require my frequent use of the dictionary and that wastes most of my time';

'Although I give full attention to new words and always memorize them, I am still overwhelmed by many words that I don't understand'.

For a teaching or learning situation such as the one under consideration where L2 texts in other subjects were in the authentic version of the L2 and where it might not be possible to moderate them, Nuttall (1982, p.169) would suggest that the FL instructor could offer, for example, specific guidance to his colleagues of other subjects as to how to train their students to read efficiently (by giving them "a specific purpose for reading", e.g. tracing an argument, etc.); and that he could introduce the SQ3R (survey, question, read, recite, review) technique which is 'essentially a strategy for private study'. Nuttall would further suggest that the FL instructor could also 'take some texts for reading lessons from the SL [second language] textbooks used in other subjects'. According to the author, this would make the students 'see the immediate relevance of what they [were] doing' (ibid, p.170).

Regarding first year English students, the situation in terms of the type of texts set for reading was different. As reported by the staff, the students were required to read simplified English material and were given reading improvement exercises (though 25% of the staff, all of whom were reading comprehension instructors, mentioned this point). However, the actual data collected on classroom reading behaviour (discussed below) did not observe such a practice taking place. We will return to this later. Incidentally, none of the Arabic-medium staff of the 'English' sub-sample reported, as was generally expected, offering exercises for intensive reading or reading improvement in the classroom. Yet, what was not an expected finding was that the students' tutors of Arabic language did not

cite such reading exercises in their responses either, in spite of their claim (as well as that of their Arabic-medium colleagues) elsewhere in the interviews, that they required their students to read mainly L1 (Arabic) references or library books (for which the students seemed to need practice such exercises as we may infer from their questionnaire results at least).

8.2.4 Classroom Observation Conclusions

Both the type of and time given to reading across the curriculum were investigated by a small-scale study to see how much importance was actually attached to reading in the classroom. It is apparent that little time was spent on reading in the classroom. The observations found that student reading was predominantly 'intermittent' and happened in what Dolan et al. (1979) would call 'bursts' of 15 seconds in any one minute on the average. This type of 'passive' reading ("glancing" at the written word on the chalkboard, O.H.P, etc.) was observed to be occurring across the curriculum in both disciplines involved in the small-scale investigation referred to above (though with relatively different proportions -- 82% of Arabic-medium session-time; 47-57% of English-medium session-time). Other 'passive' activities found to be occupying the student's time in the classroom (even in reading comprehension lessons) included listening (30-50 % of session-time) and copying (29-37% of session-time).

One possible explanation, derived from the observations of this situation in the classroom was that the students only behaved in this way because it was an expected reaction to (or reflection of) the lecturer-activities, revealed by the same data, that

demanding such behaviour, namely in order of dominance: lecturer-informing; writing; discussing; and reading (mainly aloud from a worksheet). Interestingly, the studies (of larger scale) done in British primary and secondary schools on the 'incidence and context of reading in the classroom' (see Lunzer and Gardner, 1979, ch.5) have shown similar results. Nuttall (1982, p.168) reporting on the same point said, '...both probability and observation suggest that in many [countries] it (fragmentary reading in the classroom) is not very different'.

This may seem understandable at university level where independent reading is expected to be conducted during out-of-university work (i.e., homework) but not in class. Yet, there is evidence (see 3.2.2) that such extended mature reading may not have been developed since the early stages of learning English in Libya (i.e., in the preparatory and secondary school levels) — this kind of development, according to Wallace (1986, p.116) 'is crucial in promoting independent learning'. The above speculation is also concluded from the data of the present thesis where the students and staff responses showed that the students had difficulties in reading required/voluntary English texts and where the students' performance in English reading was found below the independent level. It is also inferred from the English teaching method (the audio-lingual approach) used at those pre-university stages, in which 'reading is played down as a source of language learning' where learners 'rarely encounter unfamiliar words or structures in print' (see Elley, 1984, p.294).

As an overall comment on the above conclusions, it appears that many students in the present study who reported their 'poor'

uses of the reading environment (particularly the academic one)—e.g., use of library, dictionary and English texts, obtained low scores in the English reading tests. The teaching practice and the situation in the classroom did not seem to help reduce such ineffective uses of the environment under consideration which in turn are negatively reflected on the learners' FL/EFL reading performance. Thus, an overall association appears to be there between the reading context and reading performance.

8.3 'Arabic' Regression Findings

A brief discussion is given here on the findings of the 'Arabic' regression model because the hypothesis assuming a link between reading environment and Arabic reading performance is not the main purpose of this investigation. However, it is worth looking into it since the same Arabic test was used for the whole sample (as a criterion) which makes it possible to analyse statistically the two major samples together. According to this analysis, the above hypothesis was generally found acceptable. The nine independent variables representing Background and Reading Environment (the two constructs of the regression model) were collectively found to be significant contributors to the variation of Arabic cloze scores. Based on the size of the beta weight, however, only three of these nine variables emerged as the most effective predictors of such variation: "sex difference", "reasons for reading" and "use of library". This may be due to the small amount of variance showed generally by the whole sample in their Arabic reading scores.

8.3.1 "Sex Difference"

The results of the 'Arabic' regression analysis (see section 6.4.1.1, Table 17 [b]) indicate that the sex of the student appears to be the most important predictor of Arabic reading performance ($\beta = -0.28$) relative to the other two significant contextual predictors acting in conjunction with it. Female students of the whole sample ($N=73$) did better than their male counterparts ($N=52$) in the Arabic cloze test (Females were coded 0 and males were coded 1). T-test of the difference between mean scores on the Arabic cloze test for male and female students (of this study) confirmed this finding and showed that the sex difference was statistically significant ($t = -3.13$, $df = 123$, $p < 0.002$). Also, in terms of scatter of scores, this sex difference in Arabic reading was consistent. The male students' scores were more widely spread, both in range (84) and in standard deviation (17.36), than female students (Range=64; $SD = 10.64$). This suggests that the male students were relatively poorer in L1 (Arabic) reading comprehension than their female colleagues.

Interestingly, the present observation about sex difference in spread of reading scores favouring the females was similarly reported by Swan (1977, pp.85-6) in his review on 'sex differences in reading achievement'. On this point, he cited several English and American studies as well as his Irish experiment where all grade-levels of primary and post-primary school stages were tested in different groupings. Swan, however, concluded that 'the frequent assumption that girls are invariably superior to boys is neither universally supported nor likely to hold true above certain age-levels'.

But two other cross-cultural studies (Blom et al., 1976; Thorndike, 1976), not mentioned by Swan's review, reported again the finding indicating the superiority of females over males in L1 reading attainment, though Blom et al. cited a limit to this difference, namely, 'through the elementary grades' only (p.484), while Thorndike did not. Instead, the latter suggested that sex differences in reading, regardless of their direction, would likely be dictated by cultural factors 'by the time one reaches the ages of 10 and above' (p.503). Around the time of such studies, Dwyer (1975, p.267) warned against the incoherent picture presented by this type of research because of, for example, the use of 'differing research methodologies, measures and samples'; and criticized the majority of the studies' explanations for sex differences in reading because of their ethnocentric bias (i.e, they were adopting a mistaken assumption that such differences "universally favour females") and of their incomplete 'account of the importance of evidence of cross-cultural variation' (p.269). Although we take heed of Dwyer's warning (which might have been attended to by such research by now), the fact remains, as far as the present work is concerned, that our whole sample's females outperformed significantly their male counterparts in the L1 (Arabic) reading test and this demands an explanation.

It is possible that the differential in Arabic reading comprehension between the sexes favouring the females is due to:

- 1) The study's females were relatively more exposed to extended written Arabic in both leisure and academic reading than were the males whose extensive reading practice was claimed to be in Arabic leisure reading only. This is concluded from two facts. Firstly,

the predominant majority of the whole sample's females were from the Arts' stream (English Department at the Education faculty) whose 'reading' subjects (where books are basic for learning) were largely Arabic-medium (see section 3.2.3.8). According to staff interview results, this female majority were required to read Arabic references/library books for homework assignments (mainly for educational/psychological subjects) while their male and minority female colleagues in the medical faculties were not (see section 7.2.5.3 [2]). Perhaps this is due to the imbalance of relevant tests in educational versus scientific studies. Responses to questionnaire items on leisure reading also revealed that the female majority of the whole sample were as good as the males with respect to Arabic reading habits (see section 8.2.2 above). Secondly, the above whole sample's female majority had had a literary background before joining the university: they belonged originally to the literary section of the secondary school programme where Arabic language instruction, for example, was given for 10 periods per week compared with that which was prescribed for the science section of the same programme (i.e., 6 periods per week) —see section 3.2.2, Table 2.

2) If we apply Chamber's (1969, p.9) theoretical argument concerning 'fiction reading' in which he indirectly pointed out that this reading may lead to fluent reading because of the 'good deal of time and effort... and motivation' it involves, and if we believe the females' reports about their top preference for Arabic stories (which their male counterparts chose as a third preference), then we may perhaps understand why the females appeared to be relatively better in Arabic reading performance

than the males in our study. Because the latter speculation obviously requires closer empirical verification, further research into it and the whole issue of sex difference in reading in Libya is recommended. As the two sexes are, in general, educationally separated in pre-university stages in Libya, this might give a good opportunity for research to study L1 reading sex differences (see Swan, 1977, p.87 referring to a similar point).

8.3.2 Reasons for Reading

The positive-signed beta weight (0.24) of this variable suggests that those who got better results (who were mainly females as indicated earlier) in Arabic cloze test tended to have voluntary reasons. This category was given the highest numerical value when coding the questionnaire item on Reasons for Reading subject-specific texts. 'Voluntary reasons' included 'named' reasons such as 'general interest in topic' and 'to find evidence for writing'. It is reasonable to expect that students motivated by such factors as well as others (supplied by them as free comments) including for example 'to enrich my background knowledge in my special field of study', 'to succeed', and 'for general knowledge' to be better readers in Arabic. These reasons seem to indicate indirectly that the students read voluntarily because they wanted to become 'better-informed' and hence successful persons in their academic specializations. Whether reading voluntarily material outside one's own curriculum (albeit related to it) mainly in L1 (Arabic) was indirectly or directly due to certain contextual factors (such as different L2 texts, limited/short reading assignments or over-emphasis on writing

assignments) or to carry-over practices e.g., reading translated material, is a matter for further research to tell more specifically.

8.3.3 "Use of Library"

Again this variable seems to maintain the negative sign for its beta weight as it did in the 'English' regression model suggesting that the non-usage of library did affect the variation of the whole sample's scores on the Arabic reading test as well. The library non-users among the whole sample included the majority of 'Medicine' sub-sample and some members of their English counterparts. As already cited in pages 270, 277, and 291 the non-usage of the library did not negatively influence reading performance; rather, it appeared to have relatively increased their reading scores. This indicates once more that the use of other print sources or channels and perhaps having a literary background for some examinees might be related to that increase.

CHAPTER NINE

SUMMARY OF THE FINDINGS AND RECOMMENDATIONS

9.1 Introduction

The overall purpose of the research was to investigate the relationship between the socio-educational reading environment in an Arab university (Al-Fateh University in Tripoli, Libya) and the reading performance in English and Arabic (L1) -- particularly the former. This was an attempt to acquire a fuller understanding of the effect of macro-reading (the broader context of reading) in an Arab university with special attention to the English-medium academic system at its beginning levels -- the preliminary year.

The subjects were three major groups of preliminary-year undergraduates (second semester) in three faculties of the University, one representing the Arts' stream and two representing the science stream. This ratio of (1:2) concerning the representation of major academic streams reflected the real situation of the English-medium system at Al-Fateh University during the period of conducting the present research in March 1985 -- where there were a single Arts' higher institution (English Department, Education Faculty) only and several Science (or "technical") faculties. Also involved in the study were twenty two lecturers and twenty other preliminary-year students.

In order to acquire the necessary information, two existing instruments were adopted in one case and modified in another and a number of new ones were created, e.g., a questionnaire, an

interview, and two English cloze tests. Factor analysis and standard multiple regression technique were among the statistical methods employed to examine the main data (the latter was used particularly to analyse the interrelation between the cloze tests' and questionnaire results). General impressions based on the data of the various instruments in the study offered an alternative, non-statistical but objective analyses.

9.2 Summary of Findings

The results of this research may be summarized as follows:

1) There is a significant relationship between reading ability in a FL (English) and individual and environmental reading variables in a FL setting -- as reported by the students involved in the research.

2) A combination of common and different individual and contextual predictors were found to account for the variance of the FL (English) reading test (43% for the Arts' stream sample; 48% for the combined Science stream sample). Examples of the different predictors include, "media reading habits and attitudes", "place of study", "ways of reading" and "book-reading habits and attitudes". Two possible explanations were given for the different predictors: a) the variations in the inevitable homogeneity of the samples with respect to the various predictors; and b) the variations in the contextual constraints (e.g., academic requirements) for each major sub-sample. The results of the study did not permit many common predictors. Below are those predictors which are found common in both major academic contexts involved in the study.

3) The common predictors of the FL (English) reading performance, "Arabic reading ability", "magazine reading", and "academic English reading practices" — e.g., use of dictionary, experiencing problems of academic reading, suggest a) the importance of L1 reading (particularly leisure extensive reading) for reading in L2 or FL (this bears out the results of Al-Rufai's, 1976 research with Iraqi students, for example); and b) the existence of shared FL learning constraints across disciplines using the FL as a medium of instruction.

4) "Father's literacy", whether acting jointly with other background factors (e.g., among the Arts' sample) or separately as a distinct background variable (e.g., among the combined Science sample), was shown to be an important predictor of the FL (English) reading performance of both major sub-samples.

5) The non-statistical but objective analyses of the study's findings revealed that many students who reported their 'poor' uses of the reading environment (particularly the academic reading environment) — e.g., the use of the bilingual dictionary more than the monolingual FL dictionary or the sole dependence on the tutors' handouts to pass examinations, obtained low scores on the FL (English) reading tests and resorted to 'short-cut' but ineffectively-used reading strategies such as translation and memorization. Moreover, it was found that the reading environment at issue appeared to be using unexpected or inadequate approaches to reading, e.g., absence of reading improvement courses in the language classroom, use of difficult required texts and lack of interesting books in the lending library. This suggests additional variables besides those amenable to the regression analyses.

6) 'Arabic' regression model results suggest also a significant, though not very large, relationship between reading ability in the L1 (Arabic) and the reading environment under investigation. This smaller relationship is thought to be probably due to the low amount of variance shown generally by the whole sample in their Arabic reading scores. Douglas's (1976) Botswana study yielded a similar result. But Douglas was examining a different language, a different age group, and different reading habits; he also used a less sophisticated technique: the chi-square.

7) The "sex of the student" appears to be the most important predictor of Arabic reading ability ($\beta=0.28$)-- where the majority of the whole sample's females (who were mainly Arts' students) did relatively better than their male counterparts in the L1 (Arabic) cloze test. Two possible reasoned speculations were given for this finding: a) the females' relatively better exposure to extended written Arabic in both leisure and academic reading; b) the females' top preference for L1 fiction reading which according to Chamber's (1969, p.9) view may be conducive to fluent reading.

8) Unexpectedly, the negative "use of library" was indicated as an effective predictor of good reading performance (in Arabic for the whole sample and in English for the Science students). Lack of interesting books (mainly in the L1) and inaccessibility to the lending library were given as important possible reasons for the non-usage of library. This suggests that despite the shortcomings of the lending library, good readers seem to find other means enabling them to practice the reading habit.

9.3 Pedagogical Implications

The above findings of the research may be classified under two major headings: a) certain characteristics of the EFL university-level reader from the 'macro-reading' perspective --as documented in this present study; and b) the situation of a reading environment in an Arab university (Al-Fateh University) needing improvement.

9.3.1 The Characteristics of EFL Reader:

Related to the first major heading are those common and specific 'macro-reading' predictors which have been found, in this study, contributing to performance in reading , particularly in EFL. These predictors are not claimed to be all the effective individual and environmental factors existing in the Arab academic context under investigation, let alone in other Arab academic settings of similar nature. Some general pedagogical recommendations may be drawn from them:

(1) We would argue that if good L1 readers (who can and do read with fewer problems and extensively in the L1) are good FL readers (as was found in this study), it would seem important for the FL reading instructor to build his reading programme on a successful L1 reading programme. This general point is borne out by writers like Al-Rufai (1976, p.240) and Nuttall (1982, pp.169-170). The latter author, for example, suggests that in a situation where L1 reading is encouraged and L1 reading materials are plenty and attractive, the FL reading instructor is advised to design his programme on information collected on his students' L1 reading and

coordinate his approaches with those methods successfully and systematically adopted by his L1 colleagues.

For instance, the FL reading instructor can find out from the L1 lecturers of other subjects the amount of reading they require their students to do. This might affect his decision as to whether long-term fresh training is needed for his FL students to train them in how to tackle many and diversified types of reading (i.e. to be critical and fluent readers) or as to whether a short-term re-training in such tasks is required where the students' prior experience in dealing with different reading demands in the L1 can be transferred or utilized to tackle similar demands in the target language. Moreover, the FL reading instructor can find out from the L1 books read by students the latter's reading interests. This might help him to select FL texts and devise FL reading tasks that are suitable and motivating for his FL students. Of course, the students' current language level and the readability of the texts should be considered when such selection is made. It might also suggest to the FL reading instructor that the students need to be made aware of other types of reading that are ancillary to or overlapping with their limited reading interests so that their reading experience can be expanded to include various genres and styles. To illustrate this point, consider the example of the L1 reading interests of this study's subjects which happened to be confined to two genres and styles: romance fiction and social problems for the female students, science and sport for the male students. In this case, both sexes can be encouraged to read for example science fiction which may appeal to both of them since it contains scientific ideas within a story framework. In so doing,

the students may be motivated to read more and with enjoyment and this in turn may improve their reading performance in the target language, provided that books on such overlapping reading types are made available and accessible to them. Heather (1981, p.127), referring to British English-speaking context and readers, argues that informing students about overlapping reading interests should be the responsibility of the librarian. This may prove difficult in a FL context such as ours where the librarian himself is not informed or unaware of specific FL reading materials in different genres and readability levels and above all where his command of the FL (English in our case) is limited or poor. In such a situation, the possible candidate to convey such information with much confidence is a knowledgeable FL reading instructor.

(2) The common predictor, "academic English reading practices" involves, as reported in this study, the use of dictionary and dealing with study reading problems such as 'much reading matter', 'understanding English texts' and 'following-up references'. The effect of this factor must be taken to mean that students are expected to read better in the FL (English in our case), if they are adequately trained and advised on the appropriate skills and information for reading for learning. Some examples of such experiences include:

i) coping with the sheer volume of required reading by having 'some idea about the relative importance of books on the [reading] lists' -- i.e. about what is basic and/or supplementary reading (see Mann, 1974, p.7), by also having specific purposes (or instructions) for reading, and by employing efficient reading strategies such as SQ3R technique (introduced by Robinson, 1946).

Since most of such approaches to academic reading, as Nuttall (ibid.) has put it, 'will apply in any language including the mother tongue', it is perhaps beneficial if these approaches or practices are initially developed in the L1 (given, of course, that the L1 situation is properly conducive to such a development)

ii) looking up words correctly in the relevant English dictionary/glossary (a monolingual one) and using it as a last resort (Cooper, 1983, p.67) and for 'serious study purpose' (Nuttall, ibid, p.32).

3) According to the 'English' regression results, good readers in EFL are those students whose fathers can read, particularly in EFL, while poor readers in EFL have fathers who are only literate in the L1 (Arabic in our case). If this is accepted, it means that the EFL-medium academic staff, especially those teaching EFL "service" study skills including reading in countries like Libya, will have to consider the background variable -- "father's literacy". The academic staff need to understand that generally in an EFL situation particularly where literacy is not yet prevalent, the home environment is not likely to help them with respect to the EFL reading achievement of their students. It is recommended, therefore, that the EFL reading instructor and his EFL-medium colleagues should design their reading or learning programmes in a manner where their professional guidance along with student peer discussion constitute primarily the major constructs for the development and improvement of their students' EFL reading. EFL-medium lecturers, particularly the EFL instructors who are trained and enthusiastic in and committed to reading can show students how to read for

learning flexibly and how to understand EFL texts, e.g. by tolerating uncertainty rather than expecting to understand every word and by using already learnt or available linguistic and non-linguistic devices; they can also show them how to read for pleasure, e.g., by providing access to stimulating graded readers at their linguistic level and within the scope of their age interest. Discussing required or voluntary reading with peers in or outside the classroom may help students learn from each other, e.g., how to understand the text or about different and further references, types or sources relevant to the reading task or interest etc.

(4) The findings of both 'Arabic' and 'English' regressions indicated that 'good' readers in the Arabic and English cloze tests were among the non-users of the lending library --especially the university library. If this is true, it does not mean that the lending library is of little use to the Arab (or Libyan in our case) undergraduate. There may be reasons which led the 'good' readers to find other channels for voluntary and required reading. In fact, some of these reasons were reported by the students in this study which included, for example, the following: (a) short borrowing periods; (b) unavailability of interesting books in the L1 (Arabic); (c) inaccessibility to library resources for some student groups; and (d) difficulties with the use of library, e.g., use of the cataloguing system etc. It is recommended, therefore, that both academics and librarians need to be aware of such constraints and perhaps of others which further Arab research might produce. This awareness needs to be translated into a well-planned and co-ordinated effort preferably between the two groups

in question with special focus on the reader-learner as their main concern. He is the one whose reading habit and independent reading have to be promoted, developed or improved respectively. Suggestions for such a collaborated effort aimed at encouraging and training undergraduates to use books and the lending library facilities can be classified under three headings: (a) co-ordinating information about reading-lists; (b) basic library instruction and (c) stocking popular literature.

As an illustration, consider the latter suggestion: in order to help in promoting the reading habit and attract students to become regular users of the library, it is recommended that popular reading materials read by the new students should be stocked by the library. For some of these materials which might be regarded as inappropriate to be stocked in a university library, it is recommended that 'some compromise' is to be made to encourage students to use the university library (see Heather, 1981, p.126). An example of such popular materials is magazines which the present study has found to be used by the 'good' readers in English cloze test results. Thus, providing such periodicals might, as Heather (ibid.) suggests, make students 'who are not keen book readers...start going to the library and eventually start borrowing books...'. The same author, who is incidentally referring to a similar point but in a different context (the popularity of magazine-reading among British young readers), also suggests that 'magazines [stocked in the school library] may also attract pupils who only borrow books from other sources'. This might be applicable in a situation like ours where non-library users were reported to get their 'read' from other sources.

(5) The results of the 'Arabic' regression model indicated that the whole sample's females outperformed their male counterparts in the L1 (Arabic) cloze test. Two types of recommendations may be suggested for this finding: one is perhaps of interest to the FL course designer, the other to the administrator of teacher education. Firstly, if females are truly competent L1 readers and if good L1 readers with some knowledge in the FL seem to require less training in FL reading than poor L1 readers (see implication no. 1 above), females having the good characteristics of L1 reading will most likely have to be given a speedier course in FL reading than that given for their male counterparts. Secondly, since many females in the present study coming from the Education Faculty and preparing to be school teachers were found to be better L1 readers than their male classmates, it is perhaps necessary that males admitted to the teacher profession should be as competent readers as the females in the L1. This precondition in the admission policy will probably attract 'males with high potential...to the teacher education programme' (see Habib-Allah, 1979, p.140).

9.3.2 The Reading Environment

in Al-Fateh University

In the above summary of findings, it is mentioned that the reading environment in Al-Fateh University--as described in this study, seemed to have certain 'inadequacies' requiring proper attention and action for improvement, at the time of undertaking the research project in 1985. Perhaps the most serious of such reported or observed 'inadequacies' were the low performance in

and 'poor' uses of academic (study) reading in EFL by the students of both major discipline involved in the investigation. Also found in the study's analyses was that such 'inadequacies' were a group of interrelated reading environment variables that were apparently associated with the students' EFL reading performance. These include classroom variables such as absence of reading improvement exercises and giving little time to reading, as well as staff variables, e.g., reading textbooks and not professional journals, meagre use of library, student variables, e.g., processing English texts by memorization, translation or consulting the bilingual dictionary and library variables, e.g., lack of interesting books. A project aiming at improving or analysing such an EFL reading environment and the students' reading performance needs to consider variables such as the above altogether and their interactions between each other. The problem at hand -- the 'poor' uses of the reading environment and low reading performance, should therefore be placed and tackled within a systematic framework. The following are three suggestions in that direction :

(i) Until recently, there has been no organized effort at Al-Fateh University aiming at facilitating reading or learning for the first-year undergraduates. This study has revealed the absence of reading techniques courses in the new students' language classroom. It also reported that the English Department in the Education Faculty was the only academic body responsible for teaching English as a skill to its first-year students and to most preliminary-year students of 'technical' faculties. Since this situation seems to have produced 'inadequate' results at least

with respect to the reading of the students involved in this study, the recommendation suggested by Douglas (1977, p.117) for improving a similar situation can be here adapted as follows: it is perhaps worthwhile if a single body is established like the ELC or ELSU in King Abdul-Aziz University or Khartoum University respectively which is to be in charge of English as a skill and serve all faculties according to their students' needs, their facilities and academics' expectations. In so doing, the English Department cited above will then be left to put all its potential into upgrading English as a subject and thereby will probably be able to produce teachers of English of high standards. Once this proposed body is realized, a programme for reading skills, including the library skills course suggested above, can be launched initially for all new students and eventually for others (e.g., demonstrators and second-year specialists) seeking instruction in more advanced reading or library skills.

(ii) According to the study's results the students said that the lecturer's handouts were adequate for passing their exams. However, despite this claim, the present study reported the 'poor' reading performance of such students. If these materials have to be used because they can serve as substitutes for some unavailable set books or as supplements helping the students to understand the difficult authentic textbooks, or simply because the students would be willing to read them, such materials should in Lunzer and Gardner's (1978, p.280) words meet 'a number of criteria' so that students can take advantage of effectively. Examples of such criteria include: (a) they should be at the language level of the students; (b) they should be written in a coherent and structured

manner and be part of a relevant programme; (c) 'they should be clear and well produced with good illustrations where needed' (ibid.) and (d) they should provide specific instructions or questions which 'put [students] in problem-solving situations and create opportunities for reflective reading to be rewarded' (Davies and Greene, 1984, p.46). Since perhaps not all lecturers can produce handouts of 'high standard' based on the above criteria, writers like Lunzer and Gardener (ibid.) suggest that the materials can be made by a team work. This may be plausible for the content area which is taught by more than one instructor but it may be difficult for the content area given by a single lecturer, particularly if the latter cannot find or enlist the technical assistance of a good typist, text designer and reprographic technician and if above all he does not know how to write a readable worksheet. In this case, the textbook being in the appropriate linguistic and conceptual level of the students and because of its final draft status (as opposed to the status of the lecturer-produced notes) may be the better means for the lecturer to use.

(iii) As has been shown, the lecturing staff were in general more engaged in informing than in discussing and students were accordingly more engaged in listening and copying than in other activities, e.g., reading or discussing reading tasks (which were reported to be passive and missing respectively) in the classroom. Yet, it was revealed that textbooks and lecturer-produced texts (albeit not extended readings) were required for reading. If such a situation prevails, it behooves the lecturing staff including

the language instructor to attach due importance to reading -- particularly active reading. This interest in reading should be demonstrated not only by requiring students to read but also by, for example, (a) facilitating reading for them (e.g., choosing relevant texts and tasks, advising on how to deal with texts effectively and discussing tasks before and after reading); (b) encouraging students to practise reading and use the library and books and (c) setting themselves (the lecturers) as examples of voluntary readers, e.g., using the library for borrowing and reference. Obviously, this requires a staff well-trained and experienced in such matters, convinced of the students' need for reading improvement and prepared to collaborate with other colleagues also aware of this need and willing to work jointly towards achieving the improvement required.

9.4 Implications for Future Research

While significant findings have been reached in the present investigation pointing to the importance of analysing EFL reading in an Arab university from the 'macro-reading' perspective, these results are not conclusive. This is because of the limitations of the present work which render it exploratory in nature. The most obvious limitation of the study is that Libyan preliminary-year students for English, Medicine and Veterinary-Medicine constitute only a very small minority of Arab (and indeed EFL readers or) undergraduates whose medium of instruction is English. The findings, therefore, may be treated as suggestive. Further research is, then, called for. Research suggestions along this line pertinent to the issues of the present study have already

been mentioned in Chapter Eight in discussions related to the following sub-headings: "place of study", "father's Arabic reading", 'the student questionnaire conclusions', "sex difference", and "reasons for reading".

APPENDICES

Appendix No.1a

Research Project: The Influence of the Socio-Educational Reading Environment in an Arab University upon English Reading Performance

This is a Test of Reading Comprehension included in the above research project. Its results will be used for research only and have nothing to do with your marks in your subjects.

Name _____

INSTRUCTIONS

The reading passage of this test has 50 missing words. You are asked to supply them in the numbered lines. Please write on each line only one word which may be short or long.

AN EXAMPLE TEST: PLEASE DO THIS BEFORE THE MAIN TEST:

Ali was a schoolboy. He ate his breakfast in the 1. _____ He was late, so he could 2. _____ be present in the first lesson. He rested waiting for the next 3. _____. As he entered the classroom his 4. _____ asked him why he was late. 5. _____ then said that he woke late and was sorry.

Please complete the test as quickly as you can - read the whole passage first to get its general idea , and read it again in order to fill in the missing words.

Please begin in the next page, if you have no questions.



Aston University

Content has been removed due to copyright restrictions

Appendix No.3a
The Student Questionnaire Schedule: In Arabic

بحث تأثير بيئة القراءة على القراءة
بالعملية في جامعة الفصح

الطالب :

يرجى النشر بعلامه [ك] في المكان المناسب لأجاباتك أو الكفاية
في الطرحة المناقش : يرجى الرجوع على جميع الأسئلة بوضوح وواقعية .

1- كم من الوقت تقضيه عادة في الامم الواجب الدراسي (منا ذلك

- بين العمل) خارج المبرك الدراسي الرسمي كل يوم ؟
- أقل من ساعة واحدة
- من ساعة الى ساعتين
- من ٢ الى ٣ ساعات
- من ٣ الى ٤ ساعات
- من ٤ الى ٥ ساعات
- من ٥ الى ٦ ساعات
- أكثر من ٦ ساعات

2- فصل تشتمل الواجبات الدراسية ، في الغالب ، على القراءة ؟

- نعم
- لا

3- كيف تقضو في الادمم وقت سلاط ؟ (صم علامة) [ك] على

الواجب التالي :

- في سنا الصم ، القراءة المرش
- في الا سنا في المرس
- في الصم ، مع الا مرش ،
- في الصم مع المرش
- من قراءة الصم والمرش
- من قراءة سلاط
- من قراءة مرش
- من قراءة مرش
- من قراءة مرش
- (ما هو المرش ؟)

4- صل قرأ صحيفه يومه أسبوعيا ؟

- مرة واحدة
- بين ٢ الى ٣ مرات
- بين ٣ الى ٤ مرات
- بين ٤ الى ٥ مرات
- بين ٥ الى ٦ مرات
- في جميع أيام الاسبوع
- لا أقرأ أصلاً

5- أقر من الصحف القابله لرامم على شراء عا

- الصحف المرش
- الصحف المرش
- الصحف المرش
- صحف المرش (ما هو المرش ؟)

6- كم من الوقت تقضيه في قراءة مجلة من خلال أسبوع ؟

- لا أقرأ أصلاً
- أكثر من الوقت المرش لقراءة الصحف
- أقل من الوقت المرش لقراءة الصحف
- تقريباً نفس الوقت المرش لقراءة الصحف

7- أقر من المجلات القابله لرامم على شراء عا ؟

- المرش
- كل المرش
- المرش
- لا أقرأ أصلاً

8. كم كتاباً . في المتوسط ، تقراء للاستمتاع أو الأطلاع الشخص (كالفنصة وغيرها) كل ثلاثة أشهر ؟

لا اقرأ كتاباً

كتاب واحد

كتابان

أكثر من كتابين

9. اذا كانت الاجابة ب (لا) هل ذلك بسبب :

عدم وجود الوقت الكافي

عدم وجود كتب شريفة

الميزان من ضياع الوقت

الارادة المزدوجة كوسيلة تسلية هاربة

سبب آخر (سأفهمه ؟)

10. من اين نتحصل على الكتب التي نقرأها للاستمتاع أو الاطلاع الشخص ؟

من الانترنت

من مكتبة الجامعة

من محل بيع الكتب

من جبهة اخرى (سأفهمه ؟)

11. كم من الوقت تقضيه في قراءة مثل ذلك الكتب أسبوعياً ؟

صغير ساعة

من ساعة إلى ساعتين

من ١ إلى ٣ ساعات

من ٢ إلى ٤ ساعات

من ٤ إلى ٥ ساعات

من ٥ إلى ٦ ساعات

أكثر من ٦ ساعات

12. أين نرى من الكتب نضعه في القراءة على يمينه ؟ (رقم ٢ اجابات وثق الكمية)

كتب علمية

كتب سياسية

تخصص

كتب رياضية

كتب تاريخية

كتب في الفن

كتب اخري (سأفهمه ؟)

كتب في العزبة

كتب في العزبة

كتب في العزبة

13. اثنى من (عزبة اللغات تستعملها في القراءة للاستمتاع أو الأطلاع الشخص ؟ (رقم اجابتك ونز الأولوية)

العربية

الانجليزية

الفرنسية

لغة اخرى

(أذكرها بالحدود)

14. هل تستعمل مكتب الاستشارة للمبتدئين كتب القراءة ؟

نعم

لا

15. اذا كانت اجابتك بـ [نعم] ، هل راجعها الصعوبات التالية ؟

لديها صعوبات

صعوبات الالقاء عند كتابة

التقييم في اوقات الاستشارة

عدم كفاية نسخ الكتب المقررة

قصير ساعات العمل بالمكتبة

صعوبة اخرون (سأفهمه ؟)

16. اثنى من المقراء التاليه يتزايد اساتذتك ، في الغالب ،

يقراءون

١. مؤتمرات الاستاذ

٢. اللقاء المقررة

٣. مصادر عامة تتعلق بكل مادة

٤. مصادر خاصة تتعلق بكل مادة

17. إذا أُجريت بالجملة (أ) من السؤال (16)، هل تعتمد كتبها على المذكرات لاجتماع فيدراساتك هذا العام؟

نعم لا

18. إذا أُجريت من [نعم] - هل اعتمدت هذا ما نحن:

- العزلة الخارجية غير مقبولة
- العزلة الخارجية مقبولة وثقافتها
- العزلة الخارجية مقبولة
- اعتماد على استراتيجيات (خطة) المذكرات الدراسية
- جميعاً (مالمعروف)

19. إذا أُجريت بالعزلة (ب) أي السؤال [16]، هل الكتاب المترجم من اللغة الهندية الموسى ؟

نعم لا

APPLIED KNOWLEDGE
INDIAN KNOWLEDGE

إذا أُجريت بالجملة (ب) أي السؤال (16)، يرجى الإجابة من 20 - 21

هل اعتمدت المذكرات الدراسية في المذكرات الدراسية؟

نعم لا

نعم لا

20. هل يصل يكمل في اعجاب الاحياء ان نجد الكتب التي يطلب ذلك الاستاذ ان نقلها؟

نعم لا

22. كيف تنظر في الغالب، كتاباً أو مقالة في تخصصاتك [اشر على اجابة أو العنصر]

- العزلة من العزلة للذات [من البداية للنهاية]
- العزلة بصرية عن بلدنا، مضمون [اسم] - تاريخ، معارف
- عزلة الأفكار - الرئيسية فقط
- العزلة - اجراء للعزلة الحقيقية

23. أين تذاكر دروسك ما تراه مثيراً لتركيب في المذكرات؟

- القسم الداخلي
- من البيت
- في المكتبة الرئيسية
- في مكتبة الكلية
- في المجلات الخارجية

24. لاحظ نظراً لما الرضا له - بلدنا، يرجى ملاحظة ؟

- نظراً عنصرية، أساسية
- نظراً عنصرية، نظراً
- نظراً عنصرية، أساسية
- لا جد، بل انظر، بل انظر، بل انظر
- لا جد، بل انظر (سأكون) (سأكون)

23- صور تواسيها المسائل الآتية من الفقرة اللاحقة
بالإنجليزية ؟ [أشر على أهم مشكلة فقط]

- لا تراجمي مشاكل
- كتب كتيبة للقرآن
- مجموعة فروع واستيعاب النصوص
- مجموعة سبع المراجع المتعلقة بالقرآن
- مشكلة أحمد (ساهر ؟)

24- كم من الوقت في المتوسط . تنفيذ في مشاهير الازلام
المريش كل مساء أثناء الرسم الدراسي ؟

- لا تقام هذه الازلام المرسومة
- من ساعة واحدة الى اثنين
- من ٢ الى ٣ ساعات
- من ٣ الى ٤ ساعات
- من ٤ الى ٥ ساعات
- من ٥ الى ٦ ساعات
- من أكثر من ٦ ساعات

25- هل تستعمل عند شراءك بالإنجليزية القياس التي ليه ؟

- تستخدم الإنجيزي
- تستخدم الإنجيزي شوي
- لا أستعمل قوما ميس
- فاموس آ نير
-

26- هل تعلمون أمر تحفظ من الزهر كلب الأشياء التي تقرأها ؟

- نعم
- لا

27- كم بحولت ؟

30- الجينس ؟

- دكر
- أنثى

31- هل تستعمل بكتان ؟

- تدخل المصنعة اليانجيزي
- تتأخر المصنعة اليانجيزي

32- صور بقراد والدك بالعربية ؟

- نعم
- لا

33- صور بقراد والدك بالإنجليزية ؟

- نعم
- لا

Appendix No.3b

The Student Questionnaire Schedule: English Translation
Research Project: The Influence of the Socio-Educational Reading
Environment in an Arab University upon English
Reading Performance

Student's name _____

Please Tick (/) the box appropriate to your answer or write in the
relevant blank. Answer all questions clearly.

Do NOT write
in this column

1. How much time (including laboratory time) do you
usually spend on homework, outside timetabled
activity everyday?

- Less than 1 hour
- Between 1 to 2 hours
- Between 2 to 3 hours
- Between 3 to 4 hours
- Between 4 to 5 hours
- Between 5 to 6 hours
- More than 6 hours

2. Do the set homeworks often involve any reading
at all?

- Yes
- No

3. How do you usually spend your free time?

- Watching television
- Listening to music
- Going out with friends
- Going out with family
- Reading newspapers & books
- Participating in sports
- Engaging in another activity
- (please specify).....

4. How often do you read a newspaper every week?

- Once a week
- Twice to three times
- Three to four times
- Four to five times
- Five to six times
- All week-days
- Never

5. Which of the following newspapers do you
usually read?

- | | |
|-------------------|---------------------------|
| al-Fajer al-Jadid | al-Reyada al-Jamahiriya |
| il-Jamahiriya | Other (please specify)... |
| al-Zahf Al-Akhdar | |

6. How often do you read a magazine in a whole week?

No magazine reading
More than newspapers
Less than newspapers
About the same as newspapers

7. Which of the following magazines do you usually read?

al-Mustakbal
al-Nahda
Kul al-Arab
Other (please specify)..
.....

8. On average, how many books do you read for pleasure (stories and other books - not textbooks) every three months?

None
One
Two
More than two

9. If 'NONE', is it for the following reasons?

Lack of time
Lack of interesting books
Fear of wasting time
Television as a major distractor
Other (please specify).....

10. Where do you get the books you read for pleasure from?

Friends
University Libraray
Bookshops
Other (please specify).....

11. How much time do you think you spend reading such books in a week?

0 hours
Between 1 to 2 hours
Between 2 to 3 hours
Between 3 to 4 hours
Between 4 to 5 hours
Between 5 to 6 hours
More than 6 hours

12. What kind of books do you like best ?
(Only 3 choices, please number them according to preference)

Science
Politics
Stories
Sport
History
Art
Islam & Arabs
Social Problems
Other (please specify).....

13. In which of these languages do you mostly read for pleasure?
 (If more than one, number them according to preference)
 Arabic
 English
 French
 Other (please specify).....
14. Do you use the lending library to find books to read?
 Yes
 No
15. If YES, have you found the following difficulties in using the library?
 No difficulty
 Difficulty in finding books
 Getting required readings for longer period
 Insufficient number of books allowed
 Short opening hours
 Other (please specify).....
16. Which of the following assigned readings do your instructors require you to read this term?
 a) worksheets c) general references
 b) course textbook d) specific references
17. If (a) is chosen in item (16), do you depend largely on the lecturer's handouts (i.e. worksheets, etc.) to PASS your courses?
 Yes
 No
18. If YES, is it for the following reasons?
 Outside reading is not required
 Outside reading takes a lot of time
 Outside reading is difficult to do
 I am used to memorizing lecture handouts
 Other (please specify).....
19. If (b) is chosen in item (16), what kind of textbook is used?
 Simplified textbook
 Original textbook
- [If (c & d) are chosen in item (16), please answer items 20, and 21]
20. Do your teachers often advise you on what to borrow or buy?
 Yes
 No
21. Can you usually find the books teachers ask you to read?

Yes
No

22. How do you most frequently read a recommended book or article in your field of study? (Tick one or more)

Reading from cover to cover
Scanning
Picking out the main ideas
Selecting chapters for intensive reading

23. Where do you usually study?

Hostel Main Library Faculty Library
Home Empty Classroom

24. Why do you read books or articles related to your subjects?

Strictly required by course tutor
Recommended by tutor
General interest in their topic
Finding evidence for my writing
Other (please specify).....

25. Do you experience any of the following problems when reading for academic purposes? (tick one answer only)

No problem
Too much reading matter
Following up reference
Other (please specify).....

26. How much time do you spend watching television, on average, each evening during the term time?

No television viewing
1 to 2 hours
2 to 3 hours
3 to 4 hours
4 to 5 hours
5 to 6 hours
More than 6 hours

27. When reading in English, do you use the following dictionaries?

Monolingual dictionary (English - English)
Bilingual dictionary (English - Arabic)
Other (please specify).....
No dictionary

28. Do you memorize everything you read?

Yes
No

29. How old are you?

30. Sex? Male Female

31. Where do you live now?
On Campus
Off Campus
32. Can your father read Arabic?
Yes
No
33. Can he read English?
Yes
No

Appendix No. 3c
Correlation Matrix

CORRELATION COEFFICIENTS.

	VAR7	VAR8	VAR9	VAR10	VAR11	VAR12	VAR13	VAR16	VAR17	VAR18	VAR33
VAR7	1.00000										
VAR8	-0.14766	1.00000									
VAR9	0.08358	-0.03410	1.00000								
VAR10	0.01719	0.11227	0.27173	1.00000							
VAR11	-0.23662	0.09497	-0.04386	0.04386	1.00000						
VAR12	-0.09117	0.01657	0.07993	0.12849	0.25068	1.00000					
VAR13	-0.11784	0.01657	0.07993	0.12849	0.25068	1.00000					
VAR16	-0.11692	0.01657	0.07993	0.12849	0.25068	1.00000					
VAR17	-0.16077	0.01657	0.07993	0.12849	0.25068	1.00000					
VAR18	-0.03339	0.01657	0.07993	0.12849	0.25068	1.00000					
VAR21	-0.09789	0.01657	0.07993	0.12849	0.25068	1.00000					
VAR22	-0.32488	0.01657	0.07993	0.12849	0.25068	1.00000					
VAR23	-0.12391	0.01657	0.07993	0.12849	0.25068	1.00000					
VAR24	-0.14750	0.01657	0.07993	0.12849	0.25068	1.00000					
VAR27	-0.05346	0.01657	0.07993	0.12849	0.25068	1.00000					
VAR28	0.00195	0.01657	0.07993	0.12849	0.25068	1.00000					
VAR29	-0.23145	0.01657	0.07993	0.12849	0.25068	1.00000					
VAR30	-0.00788	0.01657	0.07993	0.12849	0.25068	1.00000					
VAR31	-0.14220	0.01657	0.07993	0.12849	0.25068	1.00000					
VAR32	-0.04951	0.01657	0.07993	0.12849	0.25068	1.00000					
VAR33	0.01767	-0.02198	0.07814	0.03834	0.04762	0.05846	0.11490	-0.08990	0.06924	-0.00760	1.00000

	VAR21	VAR22	VAR23	VAR24	VAR27	VAR28	VAR29	VAR30	VAR31	VAR32	VAR33
VAR7	-0.09789	-0.32488	-0.12391	-0.14750	-0.06346	0.00195	-0.23145	-0.00788	-0.14220	-0.04951	0.01767
VAR8	0.16207	0.17355	-0.09468	0.17117	0.05974	0.09024	0.04822	0.11692	0.05401	0.04295	-0.02198
VAR9	0.10843	-0.08611	-0.06506	0.08278	0.10280	-0.02561	0.09495	0.09253	0.11682	-0.04702	0.07814
VAR10	0.24391	0.01828	0.10367	0.10953	0.02561	0.16619	0.09495	-0.17891	-0.09897	-0.02936	0.03334
VAR11	0.29086	0.25475	0.15058	-0.09701	0.11845	0.01328	0.15794	0.04201	0.23204	0.12932	0.04762
VAR12	0.19139	-0.01139	-0.03142	0.12339	0.05097	-0.00086	0.06599	-0.06359	-0.00086	-0.00342	0.05946
VAR13	-0.21471	0.05779	-0.12338	-0.00317	-0.10322	0.00640	0.15794	0.04201	0.20626	0.17399	0.11490
VAR16	0.19044	0.20282	0.18588	0.07022	-0.03637	0.00640	0.02450	-0.04822	0.07596	0.03285	-0.08990
VAR17	0.21685	0.02293	-0.00935	0.07673	0.08816	0.21579	0.04697	0.04822	0.15571	0.05296	0.06924
VAR18	0.05329	0.12372	-0.06975	0.04232	0.06672	-0.00090	0.06672	0.07691	0.15583	0.07008	-0.00760
VAR21	1.00000	0.08019	0.12842	0.17429	-0.01049	0.12563	0.07905	-0.16736	0.04996	-0.02730	0.00387
VAR22	0.08019	1.00000	0.07621	0.03084	0.10599	-0.12720	0.21944	0.20314	0.20314	0.13348	-0.16152
VAR23	0.12842	0.07621	1.00000	-0.04237	0.00176	-0.08984	0.00302	0.07450	0.02746	0.17254	-0.15562
VAR24	0.17429	0.03084	-0.04237	1.00000	-0.10234	0.10321	0.01364	0.06117	-0.02198	-0.00731	0.08524
VAR27	-0.01049	0.10599	0.00176	-0.10234	1.00000	0.08713	0.01364	0.02776	0.1	0.00409	0.14282
VAR28	0.12563	-0.12720	0.00176	0.03084	0.08713	1.00000	-0.01325	-0.04742	-0.0742	-0.05163	0.13173
VAR29	0.07905	0.21944	0.00302	0.01364	0.02776	-0.01325	1.00000	0.08913	0.15126	-0.02350	0.00946
VAR30	-0.16736	0.20314	0.07450	0.06117	0.02776	-0.04742	0.08913	1.00000	0.39399	0.31781	0.03774
VAR31	0.04996	0.20314	0.02746	-0.02198	0.17254	-0.04742	0.15126	0.39399	1.00000	0.50819	-0.03428
VAR32	-0.02730	0.13348	0.17254	-0.00731	0.00409	0.03163	-0.02350	0.31781	0.50819	1.00000	0.06743
VAR33	0.00387	-0.15162	-0.15562	0.08624	0.14282	0.13173	0.00546	0.03774	-0.03428	0.06743	1.00000

Appendix No.4

Structured Interview: Lecturers in Content Areas & EFL
Research Project: The Influence of the Socio-Educational Reading Environment in an Arab University upon English Reading Performance

Faculty: _____ Nationality: _____
Department: _____
Subject: _____
Lecturer's Name: _____

1. For how long have you taught in this faculty?
Less than 1 year
1 to 3 years
More than 3 years
2. For how long have you taught this course?
Less than 1 year
1 to 3 years
More than 3 years
3. Do the set homeworks for this course involve any reading at all?
Yes
No
4. If NO, is it for the following reasons?
Out-of-class reading is irrelevant
Out-of-class reading in English is difficult for the students
No time for reading assignments
Other (please specify).....
5. If YES, what have assigned for reading in this course?
a) worksheets
b) course textbook
c) general references
d) specific references
6. Which of the categories in item (5) do you consider indispensable for the students to PASS this course?
a) worksheets c) general references
b) course textbook d) specific references
7. What methods do you have for finding out whether or not the students have understood what they have read?
Formal testing
Informal testing
Discussion
Other (please specify).....

8. Do you find it necessary to read in order to prepare your classes in this course?
 Yes
 No
9. If YES, in what language(s) do you read?
 Arabic
 English
 Other (please specify).....
10. How frequently do you read in that/those language(s)?
 Daily Weekly Monthly occasionally
11. What do you read in order to prepare your classes?
 a) course textbook
 b) professional journals
 c) specific library books
 d) other (please specify).....
12. How often do you read a newspaper every week?
 Once a week
 Twice to 3 times
 Three to 4 times
 Four to 5 times
 Five to 6 times
 All week-days
 Never
13. Which of the following newspapers do you usually read?
 al-Zahf Al-Akhdar al-Fajer Al-Jadid
 il-Jamahiriya Other (please specify)

14. How much time do you think you spend reading a magazine in a week?
 No magazine reading
 More than newspapers
 Less than newspapers
 About the same as newspapers
15. Which of the following magazines do you usually read?
 Time Newsweek
 al-Mustakbal Other (please specify)

16. On average, how many books do you read for pleasure in a month?
 None One Two More than Two

17. Where do you get the books you read for pleasure from?
 Friends
 Lending library
 Bookshops
 Other (please specify).....

18. How much time do you think you spend reading such books in a whole week?
 0 hours
 Between 1 to 2 hours
 Between 2 to 3 hours
 Between 3 to 4 hours
 Between 4 to 5 hours
 Between 5 to 6 hours
 More than 6 hours

20. How much time do you spend watching television, on average, each evening during the term time?
 No Television Viewing
 1 to 2 hours
 2 to 3 hours
 3 to 4 hours
 4 to 5 hours
 5 to 6 hours
 More than 6 hours

21. By means of the numbers 1 (most) 2, 3, and 4 (least) indicate the time the course devotes to each skill.
 Listening
 Speaking
 Reading
 Writing

22. If reading is relevant, indicate which of the following types of reading activities apply in your lessons.

APPLIES

	A lot	A certain Amount	Not very much	Not at all
a) Following while the lecturer reads				
b) Reading instructions from board				
c) Reading instructions from worksheet				
d) Reading instructions from textbook				
e) Personal research in library from a variety of sources				
f) Class intensive reading of short texts				

- g) Reading to improve reading skills
- h) Other (please specify).....

23. How do your students read in English?
Fluently
Little difficulty
Some difficulty
Great difficulty

24. What do they read in English?
Simplified readers
Authentic textbooks
Professional journals
Your handouts
Other (please specify).....

LIST OF REFERENCES

- Alam Al-Ma'Alumat (1982) 'Na'tijat Im'tihan Kulliyat attar'biya al-Sana al-Rabi'a Kism al-Mak'tabaat -- 1981 - 82' (Exam Results of 4th Year Library Sciences Students), 5 (3):61.
- Alderson, C.J. (1983) 'The Cloze Procedure and Proficiency in English as a Foreign Language', in J.W. Oller (ed.) Issues in Language Testing Research. Rowley, MA: Newbury House.
- (1984) 'Reading in a Foreign Language: a Reading Problem or a Language Problem?', in C.J. Alderson and A.H. Urquhart (eds.) Reading in a Foreign Language. London: Longman.
- Alderson, C.J., and A.H. Urquhart (1984) 'Postscript on Steffensen and Joag-Dev ', in C.J. Alderson and A.H. Urquhart (eds.) Reading in a Foreign Language. London: Longman.
- Al-Jame'ha (1982) 'Nasha'tat wa Akhbaar' (Events and News), (3):13.
- Al-Malki, K.M. (1981) 'Ziyara li Maktabat Kulliyat Azzira'ha', (A Visit to the Library of Agriculture Faculty) Alam Al-Ma'Alumat, 4 (1):84-93.
- Al-Qadhafi, M. (1976-1979) Al-Kitab al-Akhdar (The Green Book, in three parts: 1. Political Organization, 2. Economic Solution, 3. Society). Tripoli: al-Sharika al-'Amma lil-Nasher wal-Tawzi' wal-I'Lan (Arabic Edition); London: Martin Brian and O'Keefe (English Edition).
- Al-Rufai, M.A.H. (1969) A Study of the Reading Abilities in English and Arabic of Baghdad University Students. Unpublished Ph.D Thesis, University of London, London.
- (1976) 'Ability Transfer and the Teaching of Reading', ELTJ, 30 (3):236-241.
- Al-Shami, I.A. (1983) 'The Need for Saudi Faculty and the Media for Instruction in Saudi Arabian Universities', Higher Education 12 (3): 285-296.
- Al-Zahaf al-Akhdar (1985) 'How'la Ta'lif al-Man'haj al-Fikri il-Jamahiyyi' (About Writing the "Jamahiriyan" Curriculum), 22nd July (302):9.
- Amarel, M. (1981) The Personal Dimension. Paper presented at the meeting of the American Educational Research Association, Los Angeles, April (Quoted in Bloome and Green, 1982).
- Anderson, J. (1976) Psycholinguistic Experiments in Foreign Language Testing. St. Lucia, Queensland: University of Queensland Press.

- Astin, A.W. (1974) 'The Methodology of Research on College Impact, Part One', in K. Marjoribanks (ed.), Environments for Learning. Windsor, Berks: NFER Publishing Company Ltd.
- Attir, M.O. (1979) Trends of Modernization in an Arab Society: An Exploratory Study. Bierut, Lebanon: Arab Development Institute.
- Bad' Lah, M.A. (1983) 'Li'mada La Na'qurah?' (Why Don't We Read?) IL Jamahiriya, 14th October: 19,22.
- Bachman, L.F. (1982) 'The Trait Structure of cloze Test Scores'. TESOL Quarterly, 16 (1):61-70.
- Baltra, A. (1983) 'Learning How to Cope with Reading in English for Academic Purposes in 26 Hours' Reading in a Foreign Language 1 (1):20-34.
- Bamberger, R. (1975) Promoting the Reading Habit. Reports and Papers on Mass Communication No. 72. Paris: The Unesco Press.
- Barclays Bank Economics Department (1986) 'Libya', ABECOR Country Report. London: Barclays.
- Bearman, J. (1986) Gadhafi's Libya. London: Zed Books Ltd.
- Bejoint, H. (1981) 'The Foreign Student's Use of Monolingual English Dictionaries: A Study of Language Needs and Reference Skills', Applied Linguistics, 2 (3):207-222.
- Belson, W.A. (1981) The Design and Understanding of Survey Questions. Aldershot: Gower.
- Bending, H.B. (1975) 'Motivation for English in an Examination-g geared School System', ELTJ, 30 (4):315-320.
- Benge, C.R. (1979) Cultural Crisis and Libraries in the Third World. London: Clive Bingley Linnert Books.
- Bensoussan, M., D. Sim and R. Weiss (1984) 'The Effect of Dictionary Usage on EFL Test Performance Compared with Student and Teacher Attitudes and Expectations', Reading in a Foreign Language 2 (2): 262 - 278.
- Betts, E.A. (1954) Foundations of Reading Instruction. New York: American Book Company.
- Blom, G.E., M. Jansen, and P. Allerup (1976) 'A Cross National Study of Factors Related to Reading Achievement and Reading Disability', in J.Merritt (ed.), New Horizons in Reading. Newark, Delaware: International Reading Association.
- Bloom, B.S. (1964) Stability and Change in Human Characteristics. New York: Wiley.

- Bloome, D. (1981) An Ethnographic Approach to the Study of Reading among Black Junior High School Students. Unpublished Doctoral Dissertation, Kent State University (Quoted in Bloome and Green, 1982).
- Bloome, D., and J. Green (1982) 'The Social Contexts of Reading: A Multidisciplinary Perspective', in B.A. Hutson (ed.), Advances in Reading and Language Research, vol.1. Greenwich: Jai Press.
- Bormuth, J.R. (1967) 'Comparable Cloze and Multiple-choice Comprehension Test Scores' Journal of Reading, 10: 291-299.
- (1969) 'Factor Validity of Cloze Tests in Measuring Comprehension', Reading Research Quarterly, 4(3):358-365.
- Bossert, S.T. (1979) Tasks and Social Relationships in Classrooms. Cambridge: Cambridge University Press.
- Botros, S. (1978) 'Problems of Book Development in the Arab World with Special Reference to Egypt', Library Trends, 26 (4): 567-573.
- Brown, J.D. (1983) 'A Closer Look at Cloze: Validity and Reliability', in J.W.Oller, Jr., (ed.), Issues in Language Testing Research. Rowley, Mass.: Newbury House.
- Brumfit, C.J. (1977) 'The Teaching of Advanced Reading Skills in Foreign Languages, with particular reference to English as a Foreign language', Language Teaching and Linguistic Abstracts, 10 (2):73-87.
- Bullock A. (1975) A Language for Life. (Report of the Bullock Committee). London: H.M.S.O.
- Buzzing, R.S. (1972) 'Influences on Primary School Children's Reading' in Melnik, Amelia, J. Merritt (eds.) The Reading Curriculum. London: Open University Press.
- Carey, F.R., J.C. Harste, and S.L. Smith (1981) 'Contextual Constraints and Discourse Processes: A Replication Study', Reading Research Quarterly, 16 (2): 201-212.
- Carroll, J.B. (1972) 'Defining Language Comprehension: Some Speculations', in R.O. Freedle and J.B. Carroll (eds.), Language Comprehension and the Acquisition of Knowledge. Washington, D.C.: V.H. Winston & Sons.
- Cazden, B.C. (1981) 'Social Context of Learning to Read', in J.T. Guthrie (ed.), Comprehension and Teaching. Newark, Delaware: International Reading Association, Inc.
- Chall, J.S. (1984) 'Readability and Prose Comprehension: Continuities and Discontinuities' in J. Flood (ed.), Understanding Reading Comprehension. Newark, Delaware: International Reading Association

- Chambers, A. (1969) The Reluctant Reader. Oxford: Pergamon Press.
- Chavey-Oller, M.A., T. Chihara, K.A. Weaver, and J.W. Oller (1985) 'When Are Cloze Items Sensitive to Constraints across Sentences?', Language Learning, 35 (2): 181-206.
- Cherry, C. (1966) On Human Communication: a review, a survey and a criticism 2nd Edition. London: M.I.T.P.
- Chihara, T., J. Oller, K. Weaver, and M.A. Chavez-Oller (1977) 'Are Cloze Items Sensitive to Constraints across Sentences?', Language Learning, 27 (1): 63-73.
- Cohen, A.D. (1980) Testing Language Ability. Rowley, Mass.: Newbury House Publishers, Inc.
- Cole, J., and E. Lunzer (1979) 'Reading for Homework', in E. Lunzer, and K. Gardner (eds.), The Effective Use Of Reading. London: Heinemann Educational Books for Schools Council.
- Cooper, D.M. (1983) Textbook Discourse Structure. Unpublished Ph.D Thesis, University of Birmingham.
- Corlett, T., and D.W. Osborne (1966) The Development of Reading Frequency Scales. London: Institute of Practitioners in Advertising.
- Cowan, J.R., and Z. Sarmad (1976) 'Reading Performance of Bilingual Children according to Type of School and Home Language', Language Learning, 26 (2): 353-376.
- Cronbach, L.J. (1951) 'Coefficient Alpha and the Internal Structure of Tests', Psychometrika, 16: 297-334.
- Cziko, G. (1983) 'Another Response to Shanahan, Kamil, and Tobin: Further Reasons to Keep the Cloze Case Open', Reading Research Quarterly, 18:361-365.
- Dahlgren, L.O. (1978) 'Students' Conceptions of Subject Matter: An Aspect of Learning and Teaching in Higher Education', Studies in Higher Education 3:25-35 (Quoted in Entwistle, 1980).
- D'Arcy, P. (1973) Reading For Meaning, vol.2: The Reader's Response. London: Hutchenson Educational for Schools Council.
- Darnell, K.D. (1970) 'Clozentropy: a Procedure for Testing English Language Proficiency of Foreign Students', Speech Monographs, 37 (1): 36-46.
- Davis, F., and T. Greene (1984) Reading for Learning in the Sciences. London: Oliver & Boy.
- Dechant, E. (1965) 'The Philosophy and Sociology of Reading', in E.L. Thurston, and L.E. Hafner (eds.) Fourteenth Yearbook of the National Reading Conference, Wisconsin: Milwaukee.

- Deeb, M.K., and M.J. Deeb (1982) Libya Since the Revolution: Aspects of Social and Political Development. New York: Praeger.
- DeFord, D.A. (1979) A Validation Study of an Instrument to Determine a Teacher's Theoretical Orientation to Reading Instruction. Unpublished Doctoral Dissertation, Indiana University.
- Dimitrijevic, N., and D. Gunton (1975) 'A Survey of the Reading Habits and Interests of Learners of English in Belgrade', ELTJ, 30 (1): 36-45.
- Dolan, T. (1975) 'The Incidence and Context of Reading in Primary and Secondary Schools', in D. Moyle (ed.) Reading: What of the Future? United Kingdom Reading Association Annual Conference. London: Ward Lock Educational
- Dolan, T., C. Harrison and K. Gardner (1979) 'The Incidence and Context of Reading in the Classroom', in E. Lunzer and K. Gardner (eds.) The Effective Use of Reading. London: Heinemann Educational Books for the Schools Council.
- Douglas, D. (1976) A Study of Reading Among Secondary School Pupils in a Developing Nation. Unpublished Ph.D. Thesis, University of Edinburgh.
- (1977) From School to University: The Study Habits Research Project Final Report. Khartoum, The Sudan: University of Khartoum.
- Dudley-Evans, T., and J. Swales (1980) 'Study Modes and Students From the Middle East', in ELT Documents 109- Study Modes and Academic Development of Overseas Students. London: The British Council.
- Dwyer, C.A. (1976) 'Comparative Aspects of Sex Differences in Reading', in D. Moyle (ed.) Reading: What of the Future? London: Ward Lock Educational.
- El-Fathaly, O., and M. Palmer (1980) Political Development and Social Change in Libya. Lexington, Mass.: Lexington Books D.c. Heath and Company.
- Elley, W.B. (1984) 'Exploring the Reading Difficulties of Second-Language Learners in Fiji', in C.J. Alderson, and A.H. Urquhart (eds.), Reading in a Foreign Language. London: Longman.
- Elley, W.B., and F. Mangubhai (1979) 'A Research Paper on Reading in Fiji', Fiji English Teachers' Journal, 15: 1-17. (Quoted in Elley, 1984)
- Elley, W.B., J.E. Watson, and C.R. Cowiel (1975) The Impact of a Book Flood. Wellington: New Zealand Council of Educational Research (Quoted in Elley, 1984)

- El-Mehdiwi, O.E. (1975) Problems and Methods of Teaching English as a Foreign Language in the Libyan Arab Republic. Unpublished M.A. Thesis, University of Kansas.
- Entwistle, N.J., J.D. Nisbit, D. Entwistle and M.D. Cowell (1971) 'The Academic Performance of Students: Prediction from Scales of Motivation and Study Methods', British Journal of Educational Psychology, 41 (3): 258-267.
- (1980) 'Students and Student Learning', in Higher Education at the Cross Roads. SRHE Annual Conference Report.
- Ezzou, M.H. (1982) 'Ma'rad al-Kitab al-Jami'ee al-Daw'lee al-Thani' (The 2nd International University Book Fair), Alam Al-Ma'Alumat, (2): 20 - 29.
- Ezzou, M.H., and A. Shalaby (1981) 'al-Ma'rad al-Alami al-Awwal lil-Kitab bi Trablus' (The 1st International Book Fair in Tripoli), Alam Al-Ma'Alumat 4 (1): 42 - 49.
- Faculty of Education (1980 - 81) Dalil Kulliyat Attar'biya (The Guidebook of Education Faculty, 1980 - 81). Tripoli, Libya: Al-Fateh University.
- (1984) Dalil Maktabat Kulliyat Attar'biya (The Guidebook of the Education Faculty Library). Tripoli, Libya: Al-Fateh University.
- Faculty of Veterinary-Medicine (1980-81) Handbook No.1. Tripoli, Libya: Al-Fateh University.
- Farhady, H. (1982) 'Measures of Language Proficiency from the Learner's Perspective', TESOL Quarterly, 16 (1): 43-59.
- Flahive, D.E. (1980) 'Separating the g Factor from Reading Comprehension' in J. W. Oller, Jr., and K. Perkins (eds.), Research in Language Testing. Rowley, Mass.: Newbury House Publishers.
- Flesch, R.F. (1948) 'A New Readability Yardstick', Journal of Applied Psychology, 32:221-233.
- Foley, J.A. (1979) Problems of Understanding Science and Technology Textbooks in English for First Year Students at the University of Petroleum and Minerals in Saudi Arabia. Unpublished Doctoral Thesis, Institute of Education, University of London.
- (1983) 'More Questions on Assumptions About Cloze Testing', RELIC Journal, 14 (1): 57-69.
- Fraser, E.D. (1973) Home Environment and the School. London: University of London Press Ltd.
- Gardner, R.C., and W.E. Lambert (1972) Attitudes and Motivation in Second Language Learning. Rowley, Mass.: Newbury House.

- Gefen, R. (1978) 'An Experiment with Cloze Testing', ELTJ, 33 (2): 122-132.
- George, A. (1985) 'Libya: Injaaz Ra'eh Ragh'ma Ij'ra'at al-Tak'shuf al-Jadida' (Arabic Translation) (Libya's Educational Development from the Early Days to the Present), Middle East Education & Training, 7 (4):38 - 39.
- Goodacre, E. (1976) 'Recent Studies of Reading Standards in the United Kingdom', in J.E. Merritt (ed.), New Horizons in Reading. Newark, Delaware: International Reading Association.
- (1980) 'Reading Research in Great Britain -- 1981', Reading, 14: 67-75.
- (1983) 'Reading Research in Great Britain -- 1982', Reading, 17 (3): 139-146.
- (1986) 'Reading Research in Great Britain -- 1984', Reading, 20 (1): 16-27.
- Goody, J. (1968) Literacy in Traditional Societies. New York: Cambridge University Press.
- Graff, H. (1972) 'Towards a Measuring of Literacy: Literacy and Social Structure in Hamilton Ontario, 1861', History of Education Quarterly, 12 (2): 411-431.
- Greenberge, M.W. (1970) 'A Study of Reading Motivation of Twenty-Three Seventh-grade Students', The Library Quarterly, 40 (2): 309-317.
- Greeney, V. (1969) An Experimental Investigation of Individualized Reading. Unpublished M.Lit Thesis, University of Dublin.
- (1980) 'Factors Related to Amount and Type of Leisure Time Reading', Reading Research Quarterly, 25 (3): 337-357.
- Greeney, V., and M. Hegarty (1987) 'Correlates of Leisure-time Reading', Journal of Research in Reading, 10 (1): 3-20.
- Griffin, P. (1977) 'How and When Does Reading Occur in the Classroom?', Theory Into Practice, 26 (5): 376-383.
- Grundin, H.U., L. Courtney, J. Langer, R. Pehrnon, H.A. Robinson and T. Sakamoto (1981) 'Cloze Procedure and Comprehension: an Exploratory Study across Three Languages', Journal of Research in Reading, 4 (2): 104-122.
- Gusbi, M. (1966) English for Libya. London: University of London Press.
- Gusbi, M., and R. John (1970) Further English for Libya. London: Longman's Group Ltd.

- Guthrie, J.I., and Seifert (1984) Measuring Readership: Rationale and Technique. Paris: Unesco.
- Habib-Allah, M. (1980) A Cloze Test Assessment of the Relationship Between Reading Comprehension in the Arabic Language and the Academic Success and Classroom Performance of Arab Student Teachers in Isreal. Unpublished Ph.D. Dissertation, Michigan State University.
- Harris, D.P. (1969) Testing English as a Second Language. New York: McGraw-Hill Books Co.
- Harris, T.L., and R.E. Hodges (1981) A Dictionary of Reading and Related Terms. London: Heinemann Educational Books and International Reading Association.
- Harrison, C. (1981) Readability in the Classroom. Cambridge: Cambridge University Press.
- Harrison, C., and K. Gardner (1977) 'Pupils' Use of Language: The Place of Reading', in M. Marland (ed.) Language Across the Curriculum. London: National Book League.
- Heap, J. (1980) 'What Counts as Reading: Limits to Certainty in assessment', Curriculum Inquiry, 10 (3): 265-292.
- Heather, P. (1981) Young People's Reading: A Study of the leisure Reading of 13-15 Year Olds. Centre for Research on User Studies (CRUS) Occasional Papers No.6. Sheffield: University of Sheffield.
- Heilenman, L.K. (1983) 'The Use of a Cloze Procedure in Foreign Language Placement', The Modern Language Journal, 67 (2) : 121-126.
- Henk, W.A., and M.L. Selders (1984) 'A Test of Synonymic Scoring of Cloze Passages', The Reading Teacher, 38: 282-287.
- Hinofotis, F.B. (1976) An Investigation of the Concurrent Validity of Cloze Testing as a Measure of Overall Proficiency in English as a Second Language. Unpublished Doctoral Dissertation, Southern Illinois University (Quoted in Foley, 1979).
- (1980) 'Cloze as an Alternative Method of ESL Placement and Proficiency Testing', in J.Oller and K. Perkins (eds.) Research in Language Testing. Rowley, Mass.: Newbury House.
- Hitchcock, J. (1978) 'Reading and Scientific English: Prospects, Problems, and Programs in Iran', in M. Trimble, L. Trimble and K. Drobic (eds.), English for Specific Purposes: Science and Technology. Oregon: Oregon State University.
- Holes, C.D. (1972) An Investigation into Some Aspects of the English Language Problems of Two Groups of Overseas Postgraduate

Students at Birmingham University . Unpublished M.A. Thesis, University of Birmingham. (Quoted in Weir, 1982)

- Horton, R.J. (1974) 'The Construct Validity of Cloze Procedure: An Exploratory Factor Analysis of Cloze, Paragraph Reading, and Structure-of-Intellect Tests' (abstract). Reading Research Quarterly, 10 (2):248-251.
- Huang, G.F. (1985) 'The Productive Use of EFL Dictionaries', RELJ Journal, 16 (2): 54-71.
- Hull, C.H., and N.H. Nie (1981) SPSS UPDATE 7-9: New Procedures and Facilities for Releases 7-9. New York: McGraw-Hill Book Company.
- Ibrahim, S. (1979) 'Advanced Reading: Teaching Patterns of Writing in the Social Sciences', in R. Mackay, B. Barkman and R.R. Jordan (eds.), Reading in a Second Language. Rowley, Mass.: Newbury House Publishers, Inc.
- Irvine, P., P. Alai and J. Oller (1974) 'Cloze, Dictation, and the Test of English as a Foreign Language (TOEFL)', Language Learning, 24: 245-252.
- Johnson, A.G. (1977) Social Statistics Without Tears. New York: McGraw-Hill.
- Keeves, J.P. (1972) Educational Environments and Student Achievement. Stockholm: Almqvist and Wiksell.
- Khurma, N. (1977) 'The F.L. Learner in the Secondary Schools of Kuwait', ELTJ, 32 (1): 78-81.
- Kerlinger, F.N. (1973) Foundations of Behavioral Research. New York: Holt
- Kezeiri, S.K. (1982) 'Re-structuring the Urban System in Libya', in E.G.H. Joffe and K.S. McLachlan (eds.), Social and Economic Development of Libya. Wisbech, Cambridgeshire: MENAS Press Ltd.
- King Abdul Aziz University, English Language Center (1981) ELC Handbook (1): General Principles. Jeddah: KAAU.
- Kohl, H. (1974) Reading, How To. Harmondsworth, Middlesex: Penguin Books Ltd.
- Kotei, S.I.A. (1981) The Book Today in Africa. Books About Books Series. Paris: Unesco Press.
- Lambert, W.E., and G.R. Tucker (1972) Bilingual Education of Children: The St. Lambert Experiment. Rowley, Mass.: Newbury House. (Quoted in Cowan and Sarmad, 1976)

- Lamme, L.L. (1974) A Longitudinal Study of the Relationship between Children's Reading Habits and Scores on a Look at Literature. Unpublished doctoral dissertation, Syracuse University.
- (1976) 'Are Reading Habits and Abilities Related?', The Reading Teacher, 30 : 21-27.
- Lapkin, S., and M. Swain (1977) 'The Use of English and French Cloze Tests in a Bilingual Education Program Evaluation: Validity and Error Analysis', Language Learning, 27: 279-314.
- Laurillard, D. (1979) 'The Processes of Student Learning', Higher Education, 8:395-409.
- Lesiak, J., and S. Bradly-Johnson (1983) Reading Assessment For Placement and Programming. Springfield, Illinois: Charles G. Thomas Publisher.
- Levine, A., and T. Reves (1985) 'What Can the FL Teacher Teach the Mother Tongue Reader?', Reading in a Foreign Language, 3 (1): 329-339.
- Lilley, A.D. (1976) 'A Rationale for an ESP Approach to Teaching English to Students of Economics at the University of Benghazi' (mimeographed), Aston University, Language Studies Unit, Reference Collection No. ESP 6A/12:1-31.
- Lunzer, E., and K. Gardner (eds.) (1979) The Effective Use of Reading. London: Heinemann Educational Books for the Schools Council.
- Mackay, R., and A.J. Mountford (ed.) (1978) English for Specific Purposes: a case study approach. London: Longman.
- Mann, P.H. (1974) Students and Books. London: Routledge and Kegan Paul.
- (ed.) (1975) Books and Undergraduates. London: National Book League.
- Marland, M. (1977) Language Across the Curriculum. London: Heinemann Educational Books.
- Marjoribanks, K. (1974) Environments for Learning. Windsor, Berks: NFER Publishing Company Ltd.
- McDill, E.L., E.D. Myers and L.C. and L.C. Rigsby (1974) 'Institutional Effects on the Academic Behaviour of High School Students' in K. Marjoribanks (ed.) Environment for Learning. Windsor, Berks: NFER Publishing Company Ltd.
- McDermott, R.P (1977) 'Social Relations as Contexts for Learning in School', Harvard Educational Review, 47 (2): 198-213.

- McDermott, R.P., and K. Gospodinoff (1979) 'Social Contexts for Ethnic Borders and School Failure'. Paper presented at meeting of the American Anthropology Association. Washington, D.C.
- Mead, R., and A. George (1973) 'The Women of Libya', Middle East International, July : 18-20.
- Miller, C.M.L., and M.R. Partlett (1974) Up to the Mark: A Study of the Examination Game. SRHE (Quoted in Entwistle, 1980).
- Ministry of Education (1974) Dirasa Tari'khiyia an Ta'Tawwar At'Talim fi al-Jumhuriya al-Arabiya Al-Libbiya min al-A'had al-Uthmani ila Wak'tina al-Hader (A Historical Study on the Development of Libyan Education). Second Edition. Tripoli: Planning and Follow-up Department, Ministry of Education.
- Monastiri, T. (1982) 'The Organization of Primary, Preparatory and Secondary Teaching in Libya from 1969 to 1979', in E.G.H. Joffe and K.S. McLachlan (eds.), Social and Economic Development of Libya. Wisbech, Cambridgeshire: MENAS Press Ltd.
- Morris, R. (1973) Success and Failure in Learning to Read. Harmondsworth, Middlesex: Penguin Books Ltd.
- Mosenthal, P., and T.J. Na (1980) 'Quality of Text Recall as a Function of Children's Classroom Competence', Journal of Experimental Child Psychology, 30:1-21.
- Moser, C.A., and G. Kalton (1971) Survey Methods in Social Investigation. 2nd Edition. London: Heinemann Educational Books
- Murakmi, M. (1980) 'Behavioral and Attitudinal Correlates of Progress in ESL by Native Speakers of Japanese' in J.W. Oller, and K. Perkins (eds.), Research in Language Testing. Rowley, Mass.: Newbury House Publishers.
- Mustafa, H., P. Nelson and J. Thomas (1983) 'Reading For Specific Purposes: The Course for the Faculty of Earth Sciences', in ELC Occasional Papers No.1 Jeddah: KAAU, College of Engineering, pp.55-61.
- Napoli, J. (1968) 'Environmental Factors and Reading Ability', The Reading Teacher, 21 (6): 552-557, 607.
- National Association of Teachers of English, Warwickshire Branch. (1968) A Survey of Children's Research. (Reported in D'Arcy, 1973)
- Nisbet, J.D., and N.J. Entwistle (1970) Educational Research Methods. London: University of London Press Ltd.
- Nuttall, C. (1982) Teaching Reading Skills in a Foreign Language. London: Heinemann Educational Books.

- Obied, A. (1982) 'Multa'ka al-Hadaraat' (A Multi-cultural Get-together), Alam Al-Ma'Alumat, 2:62-66.
- Ohnmacht, F.W., W.W. Weaver, and E.T. Kohler (1970) 'Cloze and Closure: a factorial study', The Journal of Psychology, 74: 206-217.
- Oller, J.W., Jr., and C.A. Conrad (1971) 'The Cloze Technique and ESL Proficiency', Language Learning, 21 (2): 183-195.
- (1972) 'Scoring Methods and Difficulty Levels for Cloze Tests of Proficiency in English as a Second Language', The Modern Language Journal, 56 (3): 151-158.
- (1973) 'Cloze Tests of Second Language Proficiency and What They Measure', Language Learning, 23 (1): 105-118.
- (1975) 'Cloze, Discourse and Approximations to English' in M.K. Burt and H.C. Duley (eds.), New Directions in Second Language Learning, Teaching and Bilingual Education: Selected Papers from the 9th Annual TESOL Convention. Washington, D.C.: TESOL.
- Oller, J.W., Jr., A.J. Hudson and P.F. Fiu (1977) 'Attitudes and Attained Proficiency in ESL: A Sociolinguistic Study of Native Speakers of Chinese in the United States', Language Learning, 27 (1): 1-27.
- (1979) Language Tests at School. London: Longman.
- Oppenheim, A.N. (1966) Questionnaire Design and Attitude Measurement. London: Heinemann.
- Osman, Z.M. (1986) 'Na'fida ala al-thaqua'fa' (An Outlook on Culture), IL Jamahiriya, 24th January: 20.
- Oxenham, J. (1980) Literacy: Writing, Reading and Social Organisation. London: Routledge & Kegan Paul.
- Paris, S., M.Y. Lipson and K.K. Wixson (1983) 'Becoming a Strategic Reader', Contemporary Educational Psychology, 8: 293-316.
- Patai, R. (1983) The Arab Mind. Revised Edition. New York: Scribner's Sons.
- Pearson, P.D., and D.D. Johnson (1978) (eds.) Teaching Reading Comprehension. New York: Holt Rinehart and Winston.
- Popkewitz, T. (1981) Context and the Sociology of Educational Knowledge. Paper presented at the meeting of the American Educational research Association, Los Angeles, April (Quoted in Bloome and Green, 1982).
- Porter, D. (1978) 'Cloze Procedure and Equivalence', Language Learning, 28 (2): 333-341.

- (1983) 'The Effect of Quantity of Context on the Ability to Make Linguistic Predictions: A Flaw in a Measure of General Proficiency', in A.Hughes and D.Porter (eds.), Current Developments in Language Testing. London: Academic.
- Price, J. (1980) 'The Structure of Postgraduate Taught Courses in Engineering: Some Implications for Language Course Design', ELT Documents 109 -- Study Modes and Academic Development of Overseas Students. London: The British Council.
- Quannes, P.S. (1972) 'Renaissance of Arab Thought and Literature', The Unesco Courier, 7: 22-25.
- Ramsden, P. (1979) 'Student Learning and Perceptions of the Academic Environment', Higher Education, 8: 411-427.
- Rankin, E.F. (1957) An Evaluation of the Cloze Procedure as a Technique for Measuring Reading Comprehension. Unpublished Doctoral Dissertation, Michigan University.
- Rapoport, A. (1966) 'What Is Information?' in A.G. Smith (ed.), Communication and Culture. New York: Holt, Rinehart and Winston.
- Reder, S., and K. Green (1980) Social Meanings of Literacy in an Alaskan Fishing Village. Paper presented at the Ethnography in Education Research Forum, Philadelphia, March (Quoted in Bloome and Green, 1982).
- Reilly, R.R. (1971) 'A Note on "Clozentropy"', Speech Monographs, 38 (4): 350-353.
- Robinson, C.G. (1981) 'Cloze Procedure: a Review', Educational Research, 23 (2): 128-133.
- Robinson, F.P. (1946) Effective Study. 2nd Edition. New York: Harper & Row.
- Rye, J. (1982) Cloze Procedure and the Teaching of Reading. London: Heinemann Educational Books.
- (1984) 'Cloze and Intersentential Constraint', Journal of Research in Reading, 7 (2):113-122.
- (1985) 'Are Cloze Items Sensitive to Constraints Across Sentences? A Review', Journal of Research in Reading, 8 (2):94-105.
- Sauls, C.W. (1971) The Relationship of Selected Factors to the Recreational Reading of 6th Grade Students. Unpublished Doctoral Dissertation, Louisiana State University.
- Scholfield, P. (1982) 'Using the English Dictionary for Comprehension', TESOL Quarterly, 16 (2): 185-194.

- Schramm, W. (1966) 'Information Theory and Mass Communication', in A.G. Smith (ed.), Communication and Culture. New York: Holt Rinehart and Winston.
- Secretariat of Education (n.d. [1978?]) Munjazat Amanat al-Ta'lim wal-Tarbiya min 1969 ila 1976-77 (The Achievements of Secretariat of Education, 1969-77). Tripoli, Libya: Secretariat of Education.
- (n.d. [1984?]) Taqrir 'an Tatwwur al-Ta'lim Khilal 1981-83 Muqa'dam ila Mu'Tammer al-Tarbiya al-Dawliya fi Dawri En'Egadiha 39 (A Report on the Development of Libyan Education, 1981-83). Mimeographed. Tripoli: n.p.
- Secretariat of Information (1979) Qa'samat wa Ma'lameh al-Tan'meiya al-Thaqa'fiya fi il-Jamahiriya (Aspects of Cultural Development in Libya). Tripoli, Libya: Secretariat of Information.
- Sen, A. (1970) Problems of Overseas Students and Nurses. Slough: National Foundation for Educational Research in England and Wales.
- Shannon, C.E, and W. Weaver (1949) The Mathematical Theory of Communication. Urbana, Ill.: University of Illinois Press.
- Sharif, A. (1983) 'Mo'awekaath Harakat Al-Nasher fi Al-Watan Al-Arabi' (Hindrances to Book Publishing in Arab Countries), Alam Al-Ma'Alumat, 1 (1): 38-74.
- Sharif, A., M. Giornaz and K. Al-Malki (1984) Di'rasat al-Estif'taa al-Eh'sa'ee lil-Nashireen al-Mushta'rikeen fi Addoura a'thaniya li-Ma'raad Trablis al-Alami lil-Kitaab (A Study on the Statistical Survey of Publishers Participating in the 2nd Session of Tripoli International Book Fair). Tripoli, Libya: The Public Establishment For Publishing, Distribution and Advertising.
- Sikiotis, N. (1981) 'Reading Habits and Preferences of Secondary-School Pupils', ELTJ, 35 (3): 300-306.
- Sivell, J.N. (1980) 'Habitual Memorisation by Literature Students--a Help as Well as a Hindrance', ELTJ, 35 (1): 51-54.
- Smith, D.E.A. (1981) 'Levels of Questioning: Teaching Creative Thinking Through ESP', English Teaching Forum, January: 15-17, 21.
- Smith, H. (1976) 'Evaluating Progress in Recreational Reading', in J.E. Merritt (ed.), New Horizons in Reading. Newark, Delaware: International Reading Association.
- Smithies, M. (1983) 'Reading Habits at a Third World Technological University', Reading in a Foreign Language, 1 (2): 111-118.

Solihull Sixth Form College (1984) Guide To Courses 1985-1986.
Solihull: SSFC.

Spolsky, B. (1969) 'Attitudinal Aspects of Second Language Learning', Language Learning, 19 (3 & 4):271-285.

----- (1971) 'Reduced Redundancy as Language Tool', in G.E. Perren and J.L.M. Trim (eds.), Applications of Linguistics. London: Cambridge University Press.

----- (1973) 'What Does It Mean to Know a Language, or How Do You Get Someone to Perform His Competence?' in J.W., Jr., and C.C. Richards (eds.), Focus on the Learner: Pragmatic Perspectives for the Language Teacher. Rowley, Mass.: Newbury House Publications.

Staiger, R. (1979) Roads to Reading. Paris: The Unesco Press.

Statistics Office, Public Establishment for Publishing, Distributing and Advertising (1985), personal interview, 18th February.

Stone, L. (1969) 'Literacy and Education in England, 1640-1900', Past and Present, (49):61-139 (Quoted in Graff, 1972).

Strang, R. (1946) 'Reading Interests, 1946', English Journal, 35:477-482. (Quoted in Smith, H., 1976).

Streiff, V. (1978) Reading Comprehension and Language Proficiency among Eskimo Children. New York: Arno Press.

Stubbs, J.B., and G.R. Tucker (1974) 'The Cloze Test as a Measure of English Proficiency', The Modern Language Journal, 58: 239-241.

Sudman, S. (1976) Applied Sampling. San Francisco: Academic Press, Inc.

Swales, J. (1978) 'Writing "Writing Scientific English"', in R. Mackay and A.J. Mountford (eds.), English for Specific Purposes: A Case Study Approach. London: Longman.

----- (1980) 'The Educational Environment and its Relevance to ESP Programme Design', in ELT Documents Special Projects in Materials Design. London: The British Council.

Swan, D. (1977) 'Sex Differences in Reading Achievement', in V. Greeney (ed.) Studies in Reading. Dublin: Educational Company.

Tadros, A. (1977) Predictive Structures in Economics Texts and the Production of Teaching Materials for Students of Economic and Social Studies. Paper for the Second Regional Conference in English for Special Purposes Held at Isfahan University in November 1977. Mimeographed: 1-30.

- Tamasczyk, J. (1979) 'Dictionaries: Users and Uses', Glottodidactica, 12: 130-119 (Quoted in Bejoint, 1981).
- Taylor, W.L. (1953) 'Cloze Procedure: A New Tool for Measuring Readability', Journalism Quarterly, 30: 415-433.
- (1954) Application of Cloze and Entropy Measures to the Study of Contextual Constraints in Samples of Continuous Prose. Unpublished Doctoral Dissertation, University of Illinois.
- (1957) 'Cloze Readability Scores as Indices of Individual Differences in Comprehension and Aptitude', Journal of Applied Psychology, 41 (1): 19-26.
- Tennstadt, F., and E. Noelle-Newmann (1979) 'Experiments in the Measurement of Readership', Journal of the Market Research Society, 21 (4): 251-267.
- Tibawi, A. (1972) Islamic Education: Its Tradition and Modernization into the Arab National Systems. London: Luzac & Company, Ltd.
- Thorndike, R. (1976) 'Reading Comprehension in Fifteen Countries', in J.E. Merritt (ed.), New Horizons in Reading. Newark, Delaware: International Reading Association.
- Ulijn, J. (1980) 'Foreign Language Reading Research: Recent Trends and Future Prospects', Journal of Research in Reading, 3 (1):17-35.
- Unesco (1978) 'Literacy in the World: Shortcomings, Achievements and Tendencies', in L.J. Chapman and P. Czernienska (eds.), Reading From Process to Practice. London: London and Henley Routledge & Kegan Paul in association with The Open University.
- (1985) Statistical Yearbook 1985. Paris: Unesco Press.
- Wagner, D.A., and A. Lotfi (1983) 'Learning to Read by "Rote"', International Journal of the Sociology of Language, 42:111-121.
- Wallace, C. (1986) Learning to Read in a Multicultural Society: The Social Context of Second Language Literacy. London: Pergamon Press.
- Wainman, H. (1978) 'Cloze Testing of Second Language Learners', ELTJ, 33 (1):126-132.
- Weaver, W.W. (1965) 'Theoretical Aspects of the Cloze Procedure', in E.L. Thurston, and L.E. Hafner (eds.), Fourteenth Yearbook of the National Reading Conference. Wisconsin: Milwaukee.
- Weaver, W.W., and A.J. Kingston (1963) 'A Factor Analysis of the Cloze Procedure and Other Measures of Reading and Language Ability', Journal of Communication, 13:252-261.