UNIVERSITI PUTRA MALAYSIA

RELATIONSHIPS BETWEEN :METACOGNITIVE AWARENESS, LEARNING STYLES, AND READING COMPREHENSION IN ENGLISH LANGUAGE LEARNING

AHMAD AZMAN BIN MOKHTAR

FPP 2001 18

RELATIONSHIPS BETWEEN METACOGNITIVE AWARENESS, LEARNING STYLES, AND READING COMPREHENSION IN ENGLISH LANGUAGE LEARNING

By

AHMAD AZMAN BIN MOKHTAR

Thesis submitted in Fulfilment of the Requirement for the Degree of Master of Science in the Faculty of Educational Studies Universiti Putra Malaysia

August 2001

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master of Science

RELATIONSHIPS BETWEEN METACOGNITIVE AWARENESS, LEARNING STYLES, AND READING COMPREHENSION IN ENGLISH LANGUAGE LEARNING

By

AHMAD AZMAN BIN MOKHTAR

August 2001

Chairperson: **Rohani Ahmad Tarmizi, Ph.D.**

Faculty: **Educational Studies**

The aim of this study was to determine the relationships between metacognitive awareness, learning styles, and reading comprehension. The study was conducted in the District of Hulu Langat with a total of 284 students who were randomly sampled from two boarding and two day schools.

The Metacognitive Awareness Inventory (MAI) was used to assess the metacognitive awareness level of the students. The Barsch Learning-style Inventory (BLSI) categorized the students into auditory, tactile, and visual learners. To assess the students' reading comprehension ability, they sat for the reading comprehension test.

Frequency distribution, independent t-test, and Pearson correlation test were used to analyze the data. The students' metacognitive awareness scores indicated that the females had a higher metacognitive awareness ($\bar{x}$ = 129.72) than the males ($\bar{x}$ = 129.62). Furthermore, statistically students from the day schools had a better metacognitive awareness level ($\bar{x}$ = 132.16) than those in the boarding schools ($\bar{x}$ = 125.86).

Analysis showed that the males were more auditory ($\bar{x}$ = 18.36) and visual ($\bar{x}$ = 20.66) than the females. However, the females were more tactile ($\bar{x}$ = 17.70). Moreover, the day school students were more auditory ($\bar{x}$ = 18.38) and tactile ($\bar{x}$ = 17.51) than the boarding school students. Nevertheless, the boarding school students were more visual ($\bar{x}$ = 20.78).

Regarding the reading comprehension ability, the females had a higher level of reading comprehension ability ($\bar{x}$ = 56.14) than the males ($\bar{x}$ = 51.62). In addition, the boarding school students were better readers ($\bar{x}$ = 54.95) than the day school students ($\bar{x}$ = 53.20).

The correlation between metacognitive awareness and reading comprehension ability was positive and significant (r = .186). Therefore, it could be concluded that metacognitive awareness played a crucial role in students' reading comprehension ability.

There was also a positive correlation between tactile (r = .301) and auditory (r = .295) students with their metacognitive awareness level. Therefore, it could be concluded that predominantly tactile and auditory students could be associated with a high level of metacognitive awareness.

On the other hand, visual students had a moderate and positive relationship (r = .523) with metacognitive awareness. This showed that higher visual level means higher metacognitive awareness among the students.

Correlation test also indicated a positive correlation between tactile (r = .131) and visual (r = .078) students with reading comprehension ability. This result suggested that the more tactile and visual the students were, the better reading comprehension ability they would have. Nevertheless, auditory students developed a negative correlation (r = -.014) with reading comprehension ability. This suggested that the more auditory the students were, the weaker reading comprehension ability they would have.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Master Sains.

HUBUNGAN KESEDARAN METAKOGNITIF, STAIL BELAJAR DAN KEMAHIRAN MEMBACA DALAM PEMBELAJARAN BAHASA INGGERIS

Oleh

AHMAD AZMAN BIN MOKHTAR

Ogos 2001

Penyelia: **Rohani Ahmad Tarmizi, Ph.D.**

Fakulti: **Pengajian Pendidikan**

Kajian ini bertujuan bagi menentukan hubungkait antara kesedaran metakognitif, stail belajar dan kemahiran membaca. Kajian ini dijalankan di dua buah sekolah berasrama dan dua buah sekolah harian dalam Daerah Hulu Langat. Ia melibatkan 284 pelajar Tingkatan Empat yang dipilih secara rawak.

'Metacognitive Awareness Inventory' (MAI) telah digunakan untuk menguji tahap kesedaran metakognitif pelajar. 'Barsch Learning-style Inventory' (BLSI) pula digunakan untuk mengkategorikan pelajar mengikut stail pembelajaran mereka. Untuk menentukan tahap kemahiran membaca pula, Ujian Pemahaman telah dijalankan.

Frekuensi, ujian-t dan korelasi telah dilaksanakan untuk menganalisa data yang diperolehi. Secara keseluruhannya pelajar-pelajar perempuan mempunyai tahap kesedaran metakognitif yang lebih tinggi ($\bar{x}$ = 129.72) dari pelajar-pelajar lelaki ($\bar{x}$ = 129.62). Analisis ujian-t juga memperlihatkan yang pelajar-pelajar sekolah menengah harian biasa ($\bar{x}$ = 132.16) mempunyai tahap kesedaran metakognitif yang lebih tinggi dari pelajar-pelajar sekolah berasrama ($\bar{x}$ = 125.86).

Analisis juga menunjukkan pelajar-pelajar lelaki adalah lebih 'auditory' ($\bar{x}$ = 18.36) dan 'visual' ($\bar{x}$ = 20.66) dari pelajar-pelajar perempuan. Walaubagaimanapun analisis menunjukkan pelajar-pelajar perempuan adalah lebih 'tactile' ($\bar{x}$ = 17.70) dari pelajar-pelajar lelaki. Analisis juga menunjukkan pelajar-pelajar sekolah harian biasa adalah lebih 'auditory' (x = 18.38) dan 'tactile' ($\bar{x}$ = 17.51) dari pelajar-pelajar sekolah berasrama. Pelajar-pelajar sekolah berasrama pula adalah lebih 'visual' ($\bar{x}$ = 20.78) berbanding pelajar-pelajar sekolah harian biasa.

Ujian kemahiran membaca pula menunjukkan pelajar-pelajar perempuan ($\bar{x}$ = 56.14) mempunyai tahap kemahiran membaca yang lebih baik dari pelajar-pelajar lelaki ($\bar{x}$ = 51.62). Pelajar-pelajar sekolah berasrama ($\bar{x}$ = 54.95) pula menunjukkan tahap kemahiran yang lebih baik dari pelajar-pelajar sekolah harian biasa ($\bar{x}$ = 53.20).

Analisis korelasi menunjukkan wujudnya hubungan yang positif antara kesedaran metakognitif dengan kemahiran membaca (r = .186). Ini membuktikan bahawa kesedaran metakognitif ada memainkan peranan penting dalam menentukan tahap kemahiran membaca seseorang pelajar.

Hubungan positif juga wujud antara pelajar-pelajar 'tactile' (r = .301), 'auditory' (r = .295) dan 'visual' (r = .523) dengan tahap kesedaran metakognitif. Ini menunjukkan pelajar-pelajar 'tactile', 'auditory' dan 'visual' yang dominan mempunyai tahap kesedaran metakognitif yang tinggi.

Ujian korelasi menunjukkan hubungan positif juga wujud antara pelajar-pelajar 'tactile' (r = .131) dan 'visual' (r = .078) dengan tahap kemahiran membaca. Keputusan ini membuktikan bahawa pelajar-pelajar 'tactile' dan 'visual' yang dominan mempunyai tahap kemahiran membaca yang tiggi.

Pelajar-pelajar 'auditory' (r = -.014) pula mempunyai korelasi negatif dengan tahap kemahiran membaca. Keputusan ujian ini menunjukkan bahawa pelajar-pelajar 'auditory' yang dominan mempunyai tahap kemahiran membaca yang rendah.

ACKNOWLEDGEMENTS

The completion of this thesis would not have been possible without the kind support, generous advice, invaluable assistance, sincere cooperation of several people whom I would like to acknowledge.

Dr. Rohani Ahmad Tarmizi, deserves a special mention for her patience, considerable assistance in framing the research questions, her invaluable guidance in analyzing the data and giving suggestions and constructive comments which have helped to improve this thesis.

Special thanks to Associate Professor Dr. Abd. Majid Mohd. Isa, Mr. Jayakaran Mukundan, and Professor Dr. Aminah Ahmad for their guidance and patience in assisting me throughout this research. Without their endless efforts this research will not be a success.

Last but not least, I wish to express my appreciation to my dearest family who is the source of my inspiration. A special thanks goes to my parents and parents-in-law for their understanding, to my beloved wife, Pn. Rafizah, for her patience, to my brothers and sisters for their moral support, and to my only son, Ahmad Azamuddeen, for his assistance. Above all, I am grateful to ALLAH the Almighty for His grace, love, and care.

AZMAN

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

A	Auditory Learning Style
BLSI	Barsch Learning-style Inventory
BS	Boarding Schools
CK	Conditional Knowledge
CM	Comprehension Monitoring
DH	Day Schools
DK	Declarative Knowledge
DS	Debugging Strategies
E	Evaluation
ESL	English as a Second Language
F	Female
IMS	Information Management Strategies
LS	Learning Style
M	Male
MA	Metacognitive Awareness
MAI	Metacognitive Awareness Inventory
MM	Maahad Muhammadiah
P	Planning
PK	Procedural Knowledge
RC	Reading Comprehension
SMAPK	Sekolah Menengah Agama Persekutuan Kajang

SMJB	Sekolah Menengah Jalan Bukit
SMJKYH	Sekolah Menengah Jenis Kebangsaan Yu Hua
T	Tactile Learning Style
V	Visual Learning Style

CHAPTER 1

INTRODUCTION

Generally, the English Language Programme for the upper secondary school level aims at building and extending upon the proficiency of the students from the lower secondary school level so as to equip them with knowledge of English and communicative skills for daily activities and certain job situations.

Accordingly, the Ministry of Education has stated four goals of the Secondary School English Programme. The four goals are to develop students' ability to:-

(1) listen to and understand spoken English in the school and in real life situations;

(2) speak effectively on a variety of topics;

(3) read and understand prose and poetry for information and enjoyment; and

(4) write effectively for different purposes.

(Huraian Sukatan Pelajaran Bahasa Inggeris Tingkatan IV, 1990)

In order to achieve these goals four components of language skills are being focused namely listening, and speaking, reading, and writing. Of all the four language skills taught in schools, reading can be considered as the most essential skill as the students' progress in other areas depend considerably on their reading ability. Hence, the teaching of reading has been of utmost importance to parents and teachers. Those concerned with helping the child to

read must have necessary knowledge of the methods of teaching reading so that students are given due assistance.

Realizing that reading is a crucial part in the English language program, the Integrated Secondary School Curriculum or KBSM language programme in our country has put a great emphasis on the learning and teaching of reading comprehension skills. At the end of the English language program for Form Four, for example, students should be able to:

a) read using correct pronunciation, and with correct intonation, word stress, and sentence rhythm.

b) use dictionaries to get the appropriate meanings of words and learn how these words are used.

c) read and understand meanings of words, phrases, and sentences.

(Huraian Sukatan Bahasa Inggeris Tingkatan IV, 1990)

There are many definitions and descriptions on reading. As a basis for discussion, Wardhaugh's (1969) description of reading is used. Wardhaugh describes reading this way:

> When a person reads a text, he is attempting to discover the meaning of what he is reading by using the visual clues of spelling, his knowledge of probabilities of occurrence, his contextual-pragmatic knowledge, and his syntactic and semantic competence to give a meaningful interpretation to the text. Reading is not a passive process, in which a reader takes something out of the text without any effort or merely recognizes what is on the page and then interprets it, a process in which a stage of decoding precedes a stage of involvement with meaning. There is little reason to suppose that there are two such discrete, non-overlapping stages. Reading is instead an active process, in which the reader must make an active

> contribution by drawing upon and using concurrently various abilities that he has acquired.
>
> (Wardhaugh, 1969)

Based on Wardhaugh's definition on reading, it is clear that reader must go through a very complicated process in order to discover the meaning of what he is reading. To reach his goal of meaning the reader must use language, interacting with the graphic display in such a way that he moves from the code to the message. This interaction involves language and thought. Further, since the graphic code itself contains no information, it becomes apparent that the reader supplies considerable linguistic and conceptual input as he responds to the graphic display. A lack of competence in any area could reasonably be expected to present an obstacle to effective reading.

One skill that readers should possess to engage successfully in a reading process is the ability to monitor their comprehension. In order to be able to monitor their comprehension, the readers need metacognitive skills. Metacognitive skills refer to the actual mental and physical actions that a reader employs in the act of reading. These skills are significant to reading because they are necessary to gain the most out of a reading activity in the least amount of time. Current researchers have defined the following abilities as metacognitive skills (Hare & Smith, 1982; Brown & Baker, 1984; Forrest-Pressley & Waller, 1984; Wong, 1986). The abilities are:-

a) clarifying reading purposes to understand task demands.

b) identifying the important aspects of the material that is being read.

c) focussing attention on the salient details of a passage, not on trivial.

d) self-monitoring or checking on going activities to ascertain whether comprehension is occurring.

e) engaging in self-questioning to meet the goals of the task.

f) taking corrective action or coordinating problem solving techniques when there is a failure in comprehending something.

g) predicting while reading so that inter-sentential and intra-textual connections are determined.

h) re-reading or speed changing to focus on material that is of different levels of difficulty.

i) concentrating and assimilating the events in a passage while in the process of reading.

The term 'comprehension monitoring' refers both to the metacognitive acts by which comprehension is evaluated and to the acts by which it is regulated by the reader (Wagoner, 1983). Many readers however are unable to monitor their reading. When they lose understanding of a text, they continue reading without realizing that they should go back and try to regain comprehension. According to Taylor (1995), in order to engage in effective reading, a reader must have the ability to control his or her cognitive processes known as "self-monitoring" or "comprehension monitoring". "Self-monitoring" or "comprehension monitoring" is the ability to monitor one's comprehension in order to detect inconsistencies in a text and to detect failure in comprehension.