The Utilisation Of Test-Taking Strategies Among Female Students In A Tertiary Institution

Asiah Jamil asiah778@salam.uitm.edu.my Academy of Language Studies University Teknologi MARA

Mohd Sallehhudin Abd. Aziz <u>salleh@pkrisc.cc.ukm.my</u> School of Language Studies and Linguistics Universiti Kebangsaan Malaysia

Norizan Abdul Razak <u>norjef@pkrisc.cc.ukm.my</u> School of Language Studies and Linguistics Universiti Kebangsaan Malaysia

Abstract

This article reports a study on test-taking strategies utilized by low and high proficiency female participants in an open-ended reading comprehension test. Based on purposive sampling, 10 students were selected from one tertiary institution. The study seeks to explore the test-taking strategies employed by female students of two levels of proficiency. Verbal reports from these participants were obtained via the retrospective protocol and playback sessions. The data provided information on participants' thinking process and revealed how they arrived at their answers and the reasons for their choice of answers. The data were transcribed verbatim and analyzed qualitatively whereby patterns of strategies were identified and categorized. On the whole the results showed both levels employed almost the same total number of strategies, 24 and 22 for the high and low proficiency participants respectively. The conclusions were drawn upon the results of the data provided by limited number of participants and thus thrust aside the claim of representativeness in terms of test-taking strategies utilized by students in the study which may also be employed by students in general.

Keywords: test-taking strategies, verbal reports, retrospective protocol, playback session, tertiary institution.

Introduction

Language tests play a powerful role in many people's lives (McNamara, 2000). The probability of finding a person who did not go through a test experience is almost none as almost everyone goes through a testing experience nowadays and the experience would have affected a person one way or the other. Shohamy (2001) iterates that the test-taking

experience would be remembered for many years by students or those who take tests. This mirrored the impact that a test has on individuals. Tests act as gateways at crucial times in education for students and those seeking employment. It becomes the "alibi, the legitimate tool for inclusion and exclusion" (Shohamy 2001, p.86). Tests are one of the indicators used by educators to evaluate students' performance and assess their own success in achieving their objectives in teaching. Tests signal students' progress and yield information on the success of the program as well. The strengths and weaknesses of our testing or teaching methods can be identified and further modified and altered to remedy test situations and test outcomes.

Language testing is one aspect of measurement used to ascertain that the objective of imparting the knowledge is met. As indicated by Bachman (2008, p.37), "the challenges we, as language testers face are in the areas where language tests are being used to make decisions about individuals and institutions". Effectiveness in testing has always taken centre stage where educators of the English language are concerned.

In the past decade research into factors that may affect performance and scores on language tests has been flourishing (Bachman, 2000). The research has concentrated primarily on areas such as characteristics of the testing procedure, including raters, the processes and strategies used by students in responding to test tasks and the characteristics of the students themselves. Language testing research tends to look at the strategies used during test performance that is in a test situation to explain variations in a specific language test performance because these strategies are directly related to the test score variations (Phakiti, 2003b). In an e-mail correspondence, Cohen (01/29/06, p.1) expresses "the need to think more in terms of frameworks describing test-taking strategies".

The focus of the study conducted was not on the number of strategies employed by a student but the types of strategies utilized by them. Based on his research, Feryal (2007, p.106) states that "good strategy use minimizes failure and enables students to take advantage of learning opportunities". According to Cohen and Upton (2006), strategies employed depend on the individual students' cognitive flexibility, language knowledge and cognitive style when attempting a question. This article reports the strategies used in a test situation by 10 female students in a tertiary institution.

Brief Literature on Test-taking Strategy Studies

Cohen (1998a) concurs that even though the field of test-taking strategy research is at a relatively early stage and its techniques are in need of refinement, there are useful information and descriptions in the literature of methods for identifying strategies utilized by students. Moreover, since the late 1970s there has been a steady increase in the number of studies on strategies carried out in the field of language testing from the point of view of the strategies used by respondents going through the process of taking the test (Cohen & Aphek 1979; Homburg & Spaan 1981; Cohen 1984; Gordon 1987; Anderson 1989; Nevo 1989; Bachman 1990; Anderson et al., 1991; Tsagari 1994; Cohen 1994;

Purpura, 1999; Abanomey, 2002; Phakiti, 2003a; Phakiti, 2003b; Cohen & Upton, 2006 and Cohen & Upton, 2007).

The need for more research on the test-taking process is evident when Messick (1989, p.54) emphasizes that "individuals performed the same task in different ways and even the same individual might perform in a different manner across items or on different occasions....". Along the same lines, Cohen (1998a) states that claims or criticisms about multiple-choice items can be substantiated or refuted by carrying out test-taking strategy research with respect to a given test, the testing situation and with given respondents. If that holds true, the same can be applied to other test formats as well. In other words, valuable insights and information into strategies utilized by students or test-takers during all test situations can be obtained.

According to Tsagari (1994) since the open-ended questions required students to produce their own answers and use their productive skills, this led them to get into the text to find the most accurate and appropriate information. Leaving the question and returning to it later was another strategy adopted in the open-ended questions. And in Tsagari's (1994) study her analysis revealed that test-takers tended to employ more than one mental processing strategy depending on the individual. This could be seen when one of the testtakers in her study expressed "different strategies or combinations of strategies can be applied in each question in order to obtain a correct answer" (Tsagari, 1994, p.48). This is consistent with Cohen and Upton (2006) who reported in their research that more than one strategy is used to respond to a question which they call, strategy "naturally grouped together" (p.48). These "grouped together" strategies were identified in a multiple-choice test and it is interesting to investigate whether it is similar in the open-ended format.

Abanomey (2002) who conducted a research on the effect of text authenticity on reading comprehension test taking strategies used by adult Saudi learners of English as a foreign language identified 10 test-taking strategies in his checklist of an open-ended reading comprehension test and 15 test-taking strategies in his multiple-choice reading comprehension test. One of the findings in his study was the number of test-taking strategies was not affected by whether the reading texts were authentic or not. The test takers who had read the open-ended questions and the test takers who had read the multiple-choice questions on both types of texts, authentic and inauthentic, showed that the kind of text did not affect the number of test-taking strategies employed. One of Abanomey's (2002) findings was that open-ended questions promote the use of more understanding related strategies. This is also consistent with Cohen and Upton's (2007) study which showed that the participants worked toward the understanding of the text.

Tsagari (1994), Abanomey (2002) and Cohen and Upton (2007), to name a few, are some of the researchers who have come up with checklists of the test-taking strategies utilised by students in a test situation. It is hoped that this exploratory study would be able to contribute in terms of producing a list of test-taking strategies in an open-ended reading comprehension test. In relation Shohamy, (2001, p.7) states, "...in the testing literature test takers are often kept silent; their personal experiences are not heard or shared. It seems that the testing profession...are not interested in such accounts...listening to the

voices of test takers provides testers with a new and unique perspective and a deep insight into tests and their meanings".

Framework of the Study

The framework of the study is mainly based on Bachman's (1990) and Canale and Swain's (1980) strategic competence. While Canale and Swain's (1980) strategic competence put the emphasis on 'compensatory' strategies or 'coping' strategies strategies used to compensate or remediate for a lack in some language area, the term has come to take on a broader meaning. Bachman (1990) provides a theoretical model of strategic competence by separating it into three components: assessment component, planning component and execution component. Later Bachman and Palmer (1996) refined Bachman's (1990) categories for strategic competence to include four components: goal-setting component (wherein the participants identify the tasks and decide what they are going to do), an assessment component (whereby the participants assess what is needed, what they have to work with, and how well they have done), a planning component (whereby the participants decide how to use the topic knowledge and language knowledge that they have) and the last component, which is the execution, (whereby participants implement the plan). Hence, this latest framework for strategic competence is broad and includes test-taking strategies within it (Theory of Language Assessment 2004). And hence too in the context of the study, the discussion on Canale and Swain's strategic competence (1980), Bachman's (1990) strategic competence and the refinement of Bachman's (1990) strategic competence in Bachman and Palmer (1996), would hopefully lend clarity to the theoretical underpinning of the present study. The discussion aims to make known the inclusion of test-taking strategies in these theoretical frameworks. The present study does not attempt to prove or disprove the theories. However, it seeks to explore students' thoughts processes in terms of test-taking strategies in a test situation.

Purpose of the Study

The purpose of this study was to investigate strategies that students use in responding to an open-ended test. Using the verbal protocol method as the data collection technique, verbal reports were generated and analyzed to ascertain the strategies used.

Research Questions

The following are the research questions for this study:-

- 1. What are the test-taking strategies used by high and low proficiency female participants in an open-ended reading comprehension test?
- 2. What are the similarities and differences in the usage of test-taking strategies found between the high and low proficiency participants?

Methodology

Selection of samples

10 participants were selected based on purposive sampling as "purposive sampling is based on the assumption that one wants to discover, understand, gain insights; therefore one needs to select a sample from which one can learn the most" (Merriam 1998, p. 60). Thus the sample chosen for this study would be able to provide information pertaining to the strategies they utilize in a test situation. Hesse-Biber & Leavy (2006, p. 70) adds that "The type of purposive sample chosen is based on the particular research question as well as consideration of the resources available to the researcher". In other words the selection of participants would also be 'guided' by what the researcher is interested to investigate or explore. Creswell (2003) echoes that in a qualitative research, participants are 'purposefully' selected to assist in responding to the issue being investigated.

An open-ended test

The open-ended reading comprehension test which was used in this study was adopted based on one component of the multiple-choice reading comprehension test in Mainstream English II (BEL250), a compulsory English course for the Diploma programs in Universiti Teknologi Mara (UiTM), one of institutions of higher learning in Malaysia. Hence the open-ended reading comprehension test is a replication of the component of the multiple-choice test.

The BEL250 paper was used as a basis for the open-ended test development due to the fact that the paper had been used and tested in the semester of November – April 2003 by Semester three diploma students in all the UiTM branches in East and West Malaysia. The paper was constructed, vetted and validated by the Academy of Language Studies (ALS) UiTM Testing and Evaluation Committee and endorsed by the Dean of ALS and the UiTM Testing and Evaluation Department.

The paper was a requirement for all Diploma students of UiTM. The structure of Mainstream English II (BEL250) consisted of the following components:-

Speaking	-	15%
Listening	-	15%
Writing	-	25%
Reading Comprehension	-	45%

The Reading Comprehension Mainstream English II (BEL250) paper was made up of the following sub-components:

Cloze passage	-	15 items
Information Transfer	-	7 items
Reading Comprehension	-	28 items

The reading comprehension, a sub-component of the Mainstream English II (BEL250) test which was in the multiple-choice format was changed into open-ended format. There were four reading comprehension passages. Each passage consisted of seven questions.

The reading passages and the questions were retained. The open-ended version mirrors the question forms of the multiple-choice questions except that the distracters were removed (Shohamy, 1984). However, some questions needed to be changed due to the nature of multiple-choice questions, one of which involved identifying false statement among distracters which were true and another choosing the best answer from the alternatives given.

Data collection technique

Retrospective protocol

Retrospective think aloud protocols was employed in this study. In retrospective protocol a participant carries out the task and then produces his verbalization after the task is completed (Green, 1998; Ericsson and Simon, 1984). In other words each participant will deliver his report immediately after he has performed his task, after he has responded to the questions in the test. This session was audio-taped. Based on an interview with Gholamreza, Cohen (2004) states that it is through verbal report that we are able to explore the participant's thinking processes. Cohen and Upton (2006) agree that one of the most widely used tools in test-taking strategy research is the verbal report.

Playback session

After the participant had completed his think aloud, the tape was played back and both the participant and the researcher listened to the tape. It was during this session a participant could clarify certain points or certain pauses in the verbal report that needed to be clarified. At this point the researcher could ask questions or seek explanations and confirmation on statements which were not clear or incomplete. Therefore, any ambiguity could be cleared at this stage. This session was also audio-taped.

Playback Sheet

The playback sheet is a written record of participants' playback sessions. The form was used to record participants' comments and notes with regard to their answers to the questions in the test.

Code		Code	
PIFL	Participant 1, female low	PIFH	Participant 1, female high
P2FL	Participant 2, female low	P2FH	Participant 2, female high
P3FL	Participant 3, female low	P3FH	Participant 3, female high
P4FL	Participant 4, female low	P4FH	Participant 4, female high
P9FL	Participant 9, female low	P5FH	Participant 5, female high

Table 1: Codes used for low- proficiency and high-proficiency female participants

Results

	Low-Proficiency – (22 strategies)	Code
1.	Understanding of Material 1	(UM1)
2.	Understanding of Material 2	(UM2)
3.	Understanding of Material 3	(UM3)
4.	Understanding of Material 4	(UM4)
5.	Refers to passage1	(RTP1)
6.	Refers to passage 2	(RTP2)
7.	Refers to passage 3	(RTP3)
8.	Refers to passage 4	(RTP4)
9.	Guessing 1	(G1)
10.	Background Knowledge 1	(BGK1)
11.	Background Knowledge 3	(BGK3)
12.	Background Knowledge 4	(BGK4)
13.	Background Knowledge 5	(BGK5)
14.	Skipped Question 1	(SQ1)
15.	Skips Question 2	(SQ2)
16.	Evaluates Decision 2	(ED2)
17.	Evaluates Decision 3	(ED3)
18.	Uses Clues 2	(UC2)
19.	Expresses Uncertainty	(EU)
20.	Mental Note	(MN)
21.	Translation	(T)
22.	Reads Passage First	(RPF)

 Table 2: Test-taking strategies employed by low-proficiency female participants

Similar test-taking strategies employed by low-proficiency female participants

In examining their transcription based on their think aloud and playback sessions, it was discovered that the low- proficiency females used 22 types of strategy in responding to a test. All the participants in this group employed four common test-taking strategies. In other words, these four strategy types were employed by all the participants at one time or another. The strategies were 'read the passage first' (RPF), 'understanding material' (UM1) which basically meant drawing conclusions based on inference, assumption and through deductive and logical reasoning, 'specifically refers to a sentence' (RTP1) and 'refers to information or selects points from the passage' (RTP2). Both RTP1 and RTP2 encouraged participants to return to the passage and look for the answers there. This was in line with Tsagari's (1994) research whereby it was found that students used strategies which required them to refer to the passage frequently whether referring to specific parts or finding clues to arrive at their answers. Both RTP1 and RTP2 were also closely related to UM1 strategy in that they involved 'understanding' of the text or passage.

It was noted that all the strategies that were commonly utilized by all the participants in this group were related to understanding and referring to the passage. In addition, all the participants began the test by reading the passage first before reading the questions. It seemed that it was of utmost importance that they understood the passage first and got a glimpse or an idea of what the whole passage was about.

	High-Proficiency – (24 strategies)	Code
1.	Understanding of Material 1	(UM1)
2.	Understanding of Material 2	(UM2)
3.	Understanding of Material 4	(UM4)
4.	Refers to passage1	(RTP1)
5.	Refers to passage 2	(RTP2)
6.	Refers to passage 3	(RTP3)
7.	Refers to passage 4	(RTP4)
8.	Guessing 1	(G1)
9.	Guessing 1	(G2)
10.	Background Knowledge 1	(BGK1)
11.	Background Knowledge 3	(BGK3)
12.	Background Knowledge 4	(BGK4)
13.	Background Knowledge 5	(BGK5)
14.	Skipped Question 1	(SQ1)
15.	Skips Question 2	(SQ2)
16.	Evaluates Decision 1	(ED1)
17.	Evaluates Decision 2	(ED2)
18.	Expresses Uncertainty	(EU)
19.	Keyword	(KW)
20.	Mental Note	(MN)
21.	Translation	(T)
22.	Reads Question	(RQ)
23.	Reads Passage First	(RPF)
24.	Reads Instruction	(RI)

 Table 3: Test-taking strategies employed by high-proficiency female participants

Similar test-taking strategies employed by high-proficiency female participants

The high-proficiency female participants utilized 24 strategy types. All of the highproficiency female participants employed four strategies: UM1, RTP1, RTP2 and RTP4. It was noted that all of the strategies were also employed by the low-proficiency female participants. RTP4 which was employed by the high-proficiency female participants was the only strategy that was utilized by some of the low-proficiency female participants, but not by all. RTP4 involved the participants having to reread the paragraph and the whole passage several times. In other words, participants took the initiative to not only reread certain parts of the paragraph or certain sentences but the whole paragraph or the whole passage. It consisted of making multiple attempts to make sense of what the paragraph or the whole passage was about.

Variation in test-taking strategies employed by low-proficiency and high-proficiency female participants

Upon examining the think aloud and playback sessions, individual participants did indeed employ different types of strategies for different types of questions. As Messick (1989) states "individuals performed the same task in different ways and even the same individual might perform in a different manner across items or on different occasions ..." (p.54). Bachman (1990) concurs that a student who took a test may adopt different and subjective strategies in completing and executing tasks. Research has confirmed that both low and high proficiency individuals do employ strategies in test situations. In relation Ismail Sheikh Ahmad and Ratnawati Mohd. Asraf (2004) examine the comprehension answering strategies of good and average readers in responding to L2 comprehension test passages and questions and discovered that the good and average readers used similar comprehension answering strategies.

One interesting finding of the study reported was to highlight the variation of strategies in both levels of proficiency. In relation, this section discusses the variation of strategies employed between the low-proficiency female and high-proficiency female group. The strategies that would be discussed are SQ1, SQ2, UC2, KW, RQ and BGK1 since these were the strategies that showed the patterns of variation between the two groups.

Skips question (SQ1)

The participants who employed this strategy skipped the question and returned to the question later. This strategy seemed to be popular among the low-proficiency females. They utilized this strategy a multiple number of times. They employed this strategy to avoid wasting time, get to the easy questions first, think about them and also hoped that while doing the other questions they would be able to find the answers to those questions.

One of the participants stated,

Saya kalau dalam periksa la kan, kan banyak sangat soalan so saya aaa.... kalau saya tak boleh fikir jugak so saya akan tinggalkan soalan ni mungkin saya akan habiskan soalan yang boleh saya jawab, pastu saya akan refer balik soalan tu.

(P3FL, lines 208-211 p.5 q.6)

(In exams there are many questions so I aaa ... if I really cannot think, I would leave this question maybe I will complete all the questions that I can answer and then I will come back to this question.)

P3FL stated that she would return to the question later. She claimed that she was trying to remember what the word 'intention' in the question meant. She said she had seen it somewhere but could not remember what it was. She insisted that perhaps she would remember it later. Another participant who utilized this strategy mentioned,

Untuk soalan ni saya memang tak jawab sebab saya memang tak tahu langsung apa maksud "All strut" tu walaupun saya baca saya refer line 27, still tak dapat jawapan. So, saya skipped untuk soalan tu buat masa ni.

(P4FL, lines 277-279 p.6 q 12)

(For this question I did not answer because I really don't know the meaning of "All strut" at all even though I referred to line 27, still I did not get the answer. So, I skipped the question for now.)

This participant had difficulty with the vocabulary as well just like the earlier participant who had problems with the word 'intention'. Thus the vocabulary hindered their process of solving the problem. Instances where participants were stumped in making sense of the questions were mostly instances where they had problems in the vocabulary used. This indicates that the participants were weak in their vocabulary and probably it is timely that the teaching of vocabulary be emphasized especially for the benefit of the low proficiency test-takers.

Skips question (SQ2)

This strategy was used when the participants did not intend to return to the question and try to solve it. This strategy was commonly used by the low-proficiency females. They claimed that they did not want to waste time reading and trying to look for the answer when they really did not know the answer. The strategy was sometimes used due to the reason that the question was just too difficult for them. In other words, the participants did not even attempt to look for the answer and just gave up. In the context of this strategy, it was as if the participants intentionally left the question out and chose not to respond to it. It would be good to provide tips to the test-takers on what to do in case they are stuck and do not know the answer to the question at all. It would be possible to inform them that sometimes it is better to guess than to leave the question unanswered. However, educators may differ in their views on the best way students may work around this 'predicament'.

Uses clues (UC2)

In this strategy the participant obtained clues from the question itself. This strategy was used only by the low-proficiency females and none of the high-proficiency females utilized this strategy. The participant who used this strategy was either using her own wisdom in looking for clues at the question itself or the participant was merely 'guessing' at this point.

...Emm...saya dapat jawapan ni aaa...because aaa...soalan nak aaa...what is unique and fantastic about Disney World. Emm...saya baca, cari jawapan, saya baca kat ayat "however, for me, its most fantastic"... mungkin sebab saya nampak ayat 'fantastic' aaa...aspect ni aaa...so saya rasa cari aaa...cari jawapan kat sini aaa...

(P2FL, lines 370-374 p.9 q.9)

(...Emm... I got this answer aaa ... because aaa ...the question wants aaa ... what is unique and fantastic about Disney World. Em ... I read, look for the answer, I read "however, for me its most fantastic" ... maybe because I see the word 'fantastic' aaa ... this aspect aaa... so I feel I look for the answer here aaa...)

It was interesting too that all the participants who used this strategy, employed the strategy on question 9. It was not surprising since the phrase "unique and fantastic" in the question, was used as the clue for these participants to look for the answer in the passage. The participant was unsure how she came up with the answer but she mentioned that 'may be because I saw the word fantastic'. She used the word 'maybe' because she was not really sure. Either way, the high-proficiency female students did not seem to think they needed the strategy to respond to any of the questions they attempted. It was as if the low proficiency participants did what they could to arrive at the answers. It was like a survival strategy for them where they utilized the 'best' tactic they know to complete the task.

Keyword (KW)

This strategy involved the participant identifying keyword/s or phrase/s that could assist her in finding the answer. The low-proficiency participants did not utilize this strategy. However, the high-proficiency female participants found it useful. In this strategy the high- proficiency females identified the keywords and, using the context surrounding the words, managed to arrive at their answer. The patterns showed that the participants using this strategy used this keyword to try to understand the paragraph or the passage in their quest for the correct answer. Again, here it refers to the search for understanding by consistent reference to the passage.

In utilizing the strategy, the high-proficiency females used this strategy mostly in combination with the RTP2 strategy. This is in line with Tsagari's (1994) and Cohen and Upton's (2007) study in which their participants 'grouped together' their strategies. For example,

Soalan nombor 5 aaa....benefit of pegaga ni jawapan ada dalam paragraph. Cuma saya tengok paragraph dan buat key point dan letak dalam jawapan.

(P3FH, lines 127-128 p.3 q.5)

(Question number 5 aaa ... benefit of pegaga, the answer is in the paragraph. I only look through the paragraph and come up with a key point and write down the answer.)

And she added,

Okay key point ni maksudnya saya mencari daun pegaga. Jawapan dia dalam paragraph ada pegaga, so aaa...bila kita nak translate kepada jawapan kita tak boleh buat semua the whole word the whole aaa....jadi saya pendekkan key point jadi saya pendekkan menjadikan jawapan.

(P3FH, lines 135-138 q.5 p.3)

(Okay key point here means, I'm looking for daun pegaga. The answer in the paragraph has the word 'pegaga', so aaa ... if we want to translate it to our answer, we cannot take the whole word ... aaa ... so I shortened the key point and shortened it and made it the answer.)

The participant utilized RTP2 and then used key point (KW) to answer question 5. Thus, she combined two strategies for one question.

"...to commit, to memory and to verbalizing information". Jawapan ini diambil daripada paragraph 8, yang menerangkan excel in exam aaa..."effective way for aaa... for studying for the students".

(P5FH, lines 609-611 p. 14 q.20)

("...to commit, to memory and to verbalizing information". The answer is taken from paragraph 8, which explains excel in exam aaa..." effective way for aaa... for studying for the students".)

Aa...klu dia aa...excel aa...excel in examination. Saya akan cari perkataan "excel in examination" dan aaa...akan aaa...pilih aaa...jawapan mungkin berdasarkan pada passage (paragraph) yang ada perkataan "excel in examination".

(P5FH, lines 620-622 p.14 q.20)

(Aaa ... the clue aaa ... excel aaa... "excel in examination". I will look for the phrase "excel in examination" and aaa ... will choose aaa ... the answer maybe based on the paragraph which has the phrase "excel in examination".) This high-proficiency participant looked into the paragraph, picked the information from the paragraph (RTP2) and used a key point or keyword (KW) to arrive at her answer. There was only one instance that KW was used on its own.

Um soalan nombor 18 ni, aaa...dia memerlukan saya browse kembali aaa... paragraph yang panjang-panjang ni. Um...malas nak tengok sebab panjang sangat paragraph. Tengok aja key point exam related stress tu. Um...dapat jawapan saya terus letak dalam ni, key points sahaja.

(P3FH, lines 483-486 p.11 q.18)

(Um ... question number 18, aaa ... it requires me to browse once again aaa ... the long paragraphs. Um ... I'm so lazy to go through because of the length of the paragraphs. I just look for key point in exam related stress. Um ... once I got the answer, I wrote here the key points only.)

This participant utilized the strategy for this question on its own and did not combine it with another strategy. The high- proficiency female participants utilized strategies which seemed to involve more 'analytical thinking' when they employed KW, RQ and BGK1. The choice of strategies was not random for these participants. The explanation and justification for their use of strategies conveyed their consciousness in utilizing the strategies. This could be inferred that this may be a reflection of their level of proficiency as opposed to the low proficiency participants who did not utilize this strategy.

Read question (RQ)

The participant who utilized this strategy read the questions before reading the passage. This strategy was utilized only by the high-proficiency and none of the low-proficiency used this strategy. One of the high-proficiency participants reported that,

I will go through the questions first aaa... and then aaa... I take some of the points from the questions um... briefly. Lepas tu saya akan go through the passage, baca semua aaa... from the start to the ending.

(P2FH, lines 12-14 p.1 q.1)

(I will go through the questions first aaa... and then aaa... I take some of the points from the questions um... briefly. After that I will go through the passage, read all of it aaa... from the start to the ending.)

And in her playback she insisted,

Yes, I will go through the questions first very fast, laju. I did that for all the three passages. I will know what to look for.

(P2FH, lines 31-32 p.1 q.1)

(Yes, I will go through the questions first very fast. I did that for all the three passages. I will know what to look for.)

She said that it is easier since her reading could be directed to the questions that she read. One of the participants also claimed that in that way, it could save time and it was faster. One of them claimed that, based on experience, the first question was always found in the first paragraph, she just quickly read the question and went to the first paragraph to look for the information there. It could be assumed they had better exposure in terms of testtaking and also they decided to utilize what they had gone through. It could also be assumed that this particular strategy works for them and thus their (the high proficiency) utilization of the strategy.

It is interesting to note that all the low-proficiency females read the passage first (RPF) before reading the questions. One of the participants from the low-proficiency group stated in her playback that, during her diploma program,

...Sebelum jawab I read the passage first and I can remember the part emm...yang the question tanya and also I understand the sentences.

(P1FL, lines 398-399 p.8 q.15)

(Before answering, I read the passage first and I can remember the part emm...which the question asked and also I understand the sentences.)

And she added,

Tapi saya prefer baca dulu senang nak faham soalan.

(P1FL, line 461 p.10)

(But I prefer to read first so it is easy to understand the questions.)

She preferred to read the passage (RPF) before answering the questions. It appeared that she chose what she thought was the best way to get to the answer that she was looking for. This also infers that the low proficiency participants needed to understand as a whole before they could answer the questions.

Background knowledge 1 (BGK1)

This strategy was utilized when a participant used her experience and knowledge in testtaking. In this strategy a participant made use of what she knew in the technique or training of test-taking. The high-proficiency females seemed to be more exposed to the technique of test-taking than the low-proficiency participants. P1FH claimed that she utilized the strategy based on how she was trained so it came naturally to her. Thus she responded to the question by using her knowledge of testtaking experience.

P2FH also utilized BGK1 strategy. She insisted that she was taught that way. She reported,

Aaa...um....biasa...saya diajar bila perkataan tu biasanya refer pada ayat yang sebelumnya ataupun aaa....apa yang kita faham pada ayat sebelumnya. Jadi dari situ saya dapat maksud dia.

(P2FH, lines 180-182 p.4 q.8)

(Aaa...um that's normal ... I was taught that the word usually refers to the sentence before it or aaa ... what we understand the sentence to mean. So I got the meaning from there.)

The high- proficiency female participants seemed to benefit from their test-taking experience and were able to utilize it in the test. It would be worth some consideration the probability of including this strategy in test-takers' preparation in taking a test. Thus, it would mean providing and coaching test-takers with techniques of test-taking.

Discussion

Based on the analysis of each group of participants, one of the common aspects that was discovered in the strategies used by the participants in both groups was text dependent types of strategies namely UM1, RTP1, RTP2, RTP4. Achieving understanding seemed to be one of the priorities for participants in strategizing their answers. Participants felt that understanding the material and being able to draw conclusions based on their reading would help them in coming up with the answers. It could also be assumed that the participants felt that the probability of obtaining a correct answer is greater if they understood the material and not merely guessing the answer. This is consistent with Cohen and Upton's (2007) study which reports that the participants in their study "... actually working to understand the text ..." (p. 234). UM1 is one of the strategies highly utilized by participants in this study. Participants utilizing this strategy sought to understand their reading so as to enable them to arrive at their answers. Hence it could be assumed that these participants were making real efforts to internalize the text. They seemed to really take pains in trying to comprehend what the text was conveying. In other words, they put in a lot of thinking in deciding what the answer to the question should be.

As indicated in their verbal reports, in their quest to achieve the understanding that would lead them to the proposed answer, the participants kept on referring to the text. They went back and forth to find the answer which would satisfy the question. This was when they utilized RTP1, RTP2 and RTP4. These three strategies are interrelated because they either referred to the sentence, selected what was relevant from the paragraph or reread the whole passage repeatedly. For instance, the participants who employed RTP1

admitted that they did it almost automatically because they were exposed to this type of question since they were young. Some of them could not verbalize their explanation as to the reasons they referred to the sentence. It was as if it was an automatic response. In RTP2 and RTP4, both of the strategies involved participants referring and going back to the text for information. It seemed that they were dependent on the text for answers. They seemed to depend a lot on the passage and were really attached to the passages for answers. It could be concluded that participants who utilized these strategies depend on the text to guide them in answering the questions. Two strategies which were observed to be commonly used by the high-proficiency participants besides the above discussed strategies were EU and KW. In employing EU, most of the participants did express some uncertainty in their decision on their answers which were believed to be very normal. This signals that they were serious in selecting the correct answers and serious about the test because it displayed their worries should they make the wrong decision. This strategy did not confine itself to the high proficiency group but was also common in the low proficiency as well. In other words, all the participants in the study were conscious of what they were doing and did care when it came to selecting their answers in a test. Thus it is not safe to assume that only the high proficiency participants evaluated their choice of answers. This strategy was not commonly identified by previous researchers (Cohen & Aphek, 1979; Homburg & Spaan, 1981; Cohen, 1984; Gordon, 1987; Anderson, 1989; Nevo 1989; Bachman, 1990; Anderson et al., 1991; Tsagari, 1994; Cohen, 1994; Purpura, 1999; Abanomey, 2002; Phakiti, 2003a; Phakiti, 2003b and Cohen & Upton, 2006). On the other hand, they may have probably labelled the same strategy differently as did Cohen and Upton (2007).

The strategies employed by the participants seemed to convey that the low-proficiency females in this group were more inclined to use strategies by which they could (i) avoid the questions and (ii) use obvious clues in the question and text. They employed SQ1, SQ2 and UC2 strategies that did not require them to use deductive reasoning or inference. SQ2 involved a test-taker leaving the question blank because he did not know the answer to the question. The low-proficiency females seemed to use the strategy more than the high-proficiency females. It was obvious that a test-taker who resorted to this strategy had not succeeded in finding the answer to the question. This again reflected on the level of proficiency of the test-takers.

The high- proficiency female participants utilized strategies which seemed to involve more 'analytical thinking' when they employed KW, RQ and BGK1. The choice of strategies was not random for these participants. The explanation and justification for their use of strategies conveyed their consciousness in utilizing the strategies. On the other hand, none of the low- proficiency females employed, for instance, the KW strategy at all. They did not seem to find this strategy useful or perhaps they did not know how to use it. It would be worth some consideration to look into how KW would and could benefit the low proficiency participants in a reading comprehension test.

Conclusion

As indicated by strategies employed by participants from both levels of proficiency, there seems to be more similarity in terms of the types of strategies employed. The high-proficiency female participants utilized 24 types of strategies and that is two more strategy types employed by the low-proficiency female participants who employed 22 types of strategies. This could infer that the number of the strategies does not seem to be a factor in the participants' ability to respond to a test or them arriving at their answers. It could be inferred that the way they utilize the strategies that they choose plays a big role in them obtaining an accurate answer. In relation this study could also pave a way for educators to think about providing 'analytical' test-taking strategy instruction especially for those students who are categorized in the low-proficiency group.

Instructional implications

Understanding the test-taking strategies students use in a test and how they arrive at their answers has important implications for instruction. Both the low and high proficiency participants in the study do employ test-taking strategies in the test and the participants employ individualized test-taking strategies which they assumed worked for them. However, both levels depended on the text heavily in responding to the text. Thus, instructional strategies should draw from their overwhelming dependence on the text in the test. This may involve placing greater emphasis on upgrading their level of comprehension competency. If they constantly referred to the text for answers, it infers that they were spending too much time trying to comprehend what the text was about. In the context of the present study, which is a test situation, students should be trained and prepared with test-taking strategies. With this in mind, students should be 'given' preparation for a reading comprehension test. The authority or individuals responsible for curriculum design could come up with an instructional plan on how to execute this. They may include test-taking strategies for reading comprehension which were employed by the high proficiency participants. Some of the strategies are KW, UC, ED and BGK1.

Strategies that may work on or be effective for one individual may not be appropriate for another. Among learners, individual differences must be taken into account to evaluate the effectiveness of techniques and instructional programs (Bransford et al. 1982 cited in Kern 1989). Cronbach and Snow (1977 cited in Kern 1989, p. 137) all agree that instructional methods can be expected to interact with learner characteristics in such a way that "the instructional approach that is best on the average is not best for all persons".

This present study has revealed what students actually do in a test situation in the Malaysian context. Thus far, educators in Malaysia could only assume as to students' process of test-taking. Some entirely overlooked this aspect of language testing while others thought there was not much 'thinking' going on during the test. They tend to take for granted that students merely sit and produce the answers as they are supposed to in a test. Most of the concerns are directed towards students' performance and how to reach

certain targets of excellence. Thus, this study should be able to shed some light and provide information as to the test-taking strategies that students use in a test situation.

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About the authors

Asiah Jamil (Ph.D) is a senior lecturer at the Academy of Language Studies, UiTM, Shah Alam. She has been teaching in UiTM for 20 years. Her areas of interest are language testing, academic writing and teaching methodologies.

Mohd Sallehhudin Abd Aziz (Ph.D) is an Associate Professor at the School of Language Studies and Linguistics, UKM. He obtained his Ph.D. in Testing & Evaluation from

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Universiti Kebangsaan Malaysia in 2002. His research interests are in Language Testing and English for Academic Purposes.

Datin Norizan Abdul Razak (Ph.D) is an associate professor at the School of Language Studies and Linguistics. She is also the Executive Editor of Internet Journal of e-Language Learning and Teaching (IJELLT) and currently heading the IRPA research on the Development of Malaysian English Competency Test for the Malaysian University Graduates.