

## THE EFFECTS OF CULTURAL BASED TEXT TYPES IN READING COMPREHENSION

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Received: 30.03.2020

Accepted: 30.07.2020

### ABSTRACT

**Background and Purpose:** This research aims to investigate the effects of Malay, Chinese and Indian cultural based text types on reading comprehension.

**Methodology:** An exploratory case study research design was employed to explore the use of cultural schemata in reading comprehension of three types of cultural text format: narrative, descriptive and info graphic. The purposive sampling method was used to select participants based on their ethnicities, English proficiency level, and their scores in prior knowledge assessment and retelling assessment. A total of 15 students, between 11- 12 years old, were selected. The retelling technique in written form, a comprehension test and an interview protocol were used as instruments to gather data in this research and they were analysed both quantitatively and qualitatively.

**Findings:** The overall findings have shown that the comprehension test scores showed better performance in info graphic texts. However, the retelling assessment scores showed better performance in retelling narrative texts. The participants' main reason for text incomprehensibility was due to the unfamiliar cultural content regardless of the types of text format

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**Contributions:** This study aids teachers in their pedagogical decisions when selecting and adapting cultural texts for reading comprehension

**Keywords:** Comprehension test, cultural schemata, reading comprehension, retelling assessment, text types.

**Cite as:** Thirunavukarasu, I., & Raja Harun, R. N. S. (2021). The effects of cultural based text types in reading comprehension. *Journal of Nusantara Studies*, 6(1), 1-23.  
<http://dx.doi.org/10.24200/jonus.vol6iss1pp1-23>

## 1.0 INTRODUCTION

One of the most challenging tasks for English second language readers, who come from a multiracial country like Malaysia, are acquiring reading comprehension. As they come from diverse cultural backgrounds, the cultural differences have some effects on their reading comprehension. Readers, who lack the appropriate cultural schemata, will face difficulties in interpreting texts (Xie, 2017; Yousef, Karimi, & Janfeshan, 2014; Radzi & Aziz, 2014; Yang, 2013). Comprehension and interpretation of texts are not only affected by the cultural schema that the readers bring into the classroom but they are also affected by the cultural content of a given text, the activation of the appropriate schemata and the text type format. Conducting a study on the impact of cultural based text types in reading comprehension and exploring students' opinions on reading different text types can shed some lights on how to solve reading comprehension problems among English second language learners.

The purpose of the study is to show the impact of cultural based text types in L2 reading comprehension in a multi-racial setting involving a total of 15 Standard Six students, between 11-12 years old, from three ethnic groups: Malays, Chinese and Indians. An exploratory case study research design, which includes analysis of retelling assessment scores, comprehension test scores and interview transcriptions, was employed in this research. The outcome of this study illuminates specific reasons which explicate students inability to comprehend the reading texts content. Some factors, which may contribute to this inability, are the cultural content of text, cultural schemata and the type of text format. Hence this study attempts to establish the connection between students' reading comprehension ability and cultural content of a text as well as the text types. The research intends to meet the following objectives:

- a) To determine the types of texts which affect reading comprehension.
- b) To examine how cultural based text content influence reading comprehension.

## 2.0 LITERATURE REVIEW

According to Urquhart and Weir (2014), learning to read and understand written words is a complex process. This process has long been considered as solely a receptive process whereby

readers usually just receive information through reading. However, current studies have contended this idea. According to Wallace and Wray (2016), reading, which was considered as solely a receptive skill in early accounts, has shifted in line with the role of the readers as active agents in comprehending reading. Therefore, reading is seen as interactive in which readers actively engaged themselves with the text.

Hassen and Dereje (2016) have discussed the development of reading models and examine the reader's role in each of these models by placing them on a continuum as the bottom-up model reader at one end and the top-down model reader at the opposite end. From these two ends, the role of the reader moves towards the middle, the interactive model, in which both models are used interchangeably depending on the difficulty and the familiarity of the text. According to Kurby and Zacks (2012), all these models are negatively correlated and they are not used simultaneously. This is because efficient readers did not solely depend on a particular reading strategy but use various reading strategies.

In addition, Kintsch and Vipond (2014) posit the idea that reading comprehension does not solely depend on decoding skills. It involves the reader processing the information taking into account the social context as well as the text format. It is a mental process that depends on prior knowledge, experience, and information in the text. Reading comprehension involves connecting ideas based on prior experiences stored in the memory. It involves bringing an individual's entire life of experience and all of individual's thinking power to comprehend what the writer has encoded. The words on the page describing a particular situation trigger memories of these experiences stored in the mind and this enables the reader to make the association and comprehend the meaning. The experiences stored as schemata provide some basis for comprehension.

Bartlett (1932), the gestalt psychologist, has developed the schema theory after observing how people retold a story from their memory. When repeating a story from memory, people tend to fill in details that are not found in the original text. These extra details have the tendency to be based on their cultural norms (Li & Lai, 2012). In similar vein, Carrell (2013) has acknowledged the role of background knowledge in language comprehension as in schema theory and has explicated that readers are often directed by a text in retrieving or constructing meaning. In other words, readers depend on previously acquired background knowledge to interpret a text. In support of this, Li and Lai (2012) has stated that background knowledge can assist readers in decoding new information.

In addition, background knowledge did not only aid the decoding of new information, but it also enhanced the reading rate (Li & Lai, 2012). When reading, people manage to deal

with micro-level linguistic features and macro-level textual analysis. The working memory is limited in capacity and too much demand on it could overload the cognitive system, which in turn leads to inefficient processing of reading task (Lee & Pulido, 2016). In contrast, successful activation of schemata can lighten the cognitive load of the working memory (Nassaji, 2014) in which can assist the readers to direct more attention to micro-level features and thus, read the text in a faster and more efficient way.

Schema theory plays an important role in first and second language reading comprehension theories. A number of research results have highlighted the critical role that schema theory plays in the reading comprehension process, and therefore, the lack of such knowledge may make the prediction and anticipation of the reading content difficult (Carrell, 2013; Charun, 2012; Barman, 2013; Al-Mahrooqi, 2013; Davoudi & Ramezani, 2014).

Several studies have investigated the effects of schema theory in ESL reading, specifically on content knowledge (schemata) and the overall familiarity of a setting (Barrot, 2016; Liu, 2015; Pornour, 2014). The results have provided further evidence on the importance of background knowledge in reading comprehension. The researcher has found that topic familiarity has a strong impact on EFL readers' comprehension.

In Malaysia, a study by Abdelaal and Sase (2014) was conducted in Universiti Putra Malaysia to investigate the relationship between prior knowledge and reading comprehension. The samples were 20 students with similar proficiency level in English as a second language from several faculties based on their performance using a prior knowledge questionnaire and two passage reading comprehension tests. Only students who had high prior knowledge in one of the text and low prior knowledge in the other were selected. The result of the study showed a strong relationship between high prior knowledge and reading comprehension.

Another study was conducted by Charun (2012) to examine the effects of schemata on the reading comprehension. The study, which investigated young ESL learners' comprehension of stories situated in native and non-native cultures, has also examined the effects of schemata on two different types of comprehension questions, namely literal and inferential comprehension questions. 21 Year 3 pupils from a Tamil vernacular primary school in Sungai Buloh, Selangor, Malaysia was required to read two narrative texts situated in non-native cultures (Roman-Catholic Filipino and Great Plains Indians) and one narrative text situated in native culture (Malaysian Hindu Indian). The participants' level of comprehension for each text was measured through written comprehension tests and verbal story retelling tasks. The scores of the comprehension questions supported the contention that schemata influence the performance of the students in the comprehension question type. The study

concludes that schemata plays an important role in the reading comprehension regardless of the students' language proficiency in the first or second language. Therefore, schemata is one of the important criteria in selecting and evaluating reading materials for ESL learners.

Arshad, Othman, and Peng (2016) have investigated a group of form four Malay students who have adequate amount of knowledge in English and Bahasa Malaysia. The study selected four passages on two different topics as an assessment for reading comprehension. The students were asked to answer multiple-choice questions which were based on the passages. Before they read and answered the questions, they were tested with a vocabulary concept test to assess the number of relevant schemata about the content of the passages. The researchers have found that schemata played an important role in reading comprehension regardless of the students' language proficiency in the first or second language. When the familiar and unfamiliar passages were examined separately, schemata were more crucial in understanding familiar passages and language proficiency was more significant in understanding unfamiliar passages. In these studies, the favourite form of assessment for reading comprehension is comprehension test. However, there is a need for an assessment type to go beyond asking readers to merely answer comprehension tests which usually are in the form of multiple choice questions. According to Atac (2012), more authentic forms of assessment which shows true representation of students' learning, achievement and motivation in regards to comprehension should be implemented. One good example is the retelling technique which has often been used to assess reading comprehension (Ebe, 2010; Liu, 2010).

Altin and Saracaloglu (2018) have examined the effect of reading comprehension instruction enriched with cultural materials on two seventh graders classes vocabulary knowledge and attitudes towards English lessons using narrative texts. In the research, a pre-test and post-test quasi-experimental model was used. Reading comprehension instruction enriched with cultural materials in two lesson hours per week was given to the learners in the experimental group for 6 weeks, while the control group followed their normal reading comprehension instruction. Although the results of the study have shown that the respondents' vocabulary knowledge were enriched, the targeted level could not be achieved due to the integration of the foreign culture which was not familiar to the students. The researcher has concluded that the learners' reading comprehension level will be increased if foreign language learning anxiety was eliminated.

In extension, Guo, Zhang, Wright, and McTigue (2020) have examined 39 experimental studies, published between 1985 and 2018, measuring graphics' effects on

readers' comprehension and they have revealed that only mixed graphics (graphics with words) have a greater effect on comprehension compared to graphics alone without any words.

Most of the above studies either focus solely on narrative texts or only on one type of text format. No research has been done to study the impact of cultural schemata on reading comprehension on various types of text format such as narrative, descriptive, and infographic texts. Thus, this study aims to bridge the gap by focusing on text types and the influence of cultural based text content on reading comprehension.

### **3.0 METHODOLOGY**

#### **3.1 Research Design**

The current study employed the exploratory case study which attempts to explore the influence of cultural schema in affecting students' reading comprehension. In addition to this, the current case study also consists of multiple methods which data from various sources are triangulated. Thus the researchers used methodological triangulation method specifically for between-method triangulation approach which combines data collected from various methods such as retelling assessment, comprehension test and interview (Song, Son, & Oh, 2015). Each method has different strengths and weaknesses. For retelling assessment, the participants may not remember what they have read and fail to retell successfully although they have understood the text. On the other hand, the participants might guess the answers for the comprehension test due to the multiple-choice questions with options. By using the methodological triangulation method, both data of the comprehension scores and the data of the retelling assessment scores were triangulated to analyse the students' ability to comprehend the cultural-based text. In addition, interview was used to get feedback from individual's participants of their reading experiences. This data is used to determine the impact of cultural-based texts on reading comprehension. The purpose of methodological triangulation is to increase the validity of the current study as triangulation can support findings from various sources and increase the validity of the study. All the data were analysed separately before a comparison is done to confirm, cross-validate, and corroborate the findings.

#### **3.2 Selection of Participants**

Purposive sampling method was used to select the participants for this research. The main criteria for the selection of the participants were the students' ethnicities, English proficiency levels, and their scores in prior knowledge assessment and retelling assessment. The first data were obtained from the class registers to determine the participants' background information.

This study analysed the background information of 60 students based on their ethnicities. The study eliminated students with mixed ethnicity to avoid any discrepancies in the data collected as the main focus was on three main ethnic groups: Malay, Chinese, and Indian. Based on this criterion, 55 participants were short listed and their English test scores were analysed in the next stage of participant selection.

The researchers selected students from the above-average class who scored grade B in the recent English monthly test. The information was obtained from the school assessment online system. This criterion was selected to ensure that the participants are of intermediate language ability to avoid having students with low proficiency which can hinder their comprehension ability and affects the data collected. The researchers did not select students who scored A in their English test as it is believed that high achievers could compensate their lack of schemata using the bottom-up process for interpretation and comprehension. The main objective was to investigate the effects of cultural-based texts on reading comprehension among intermediate students within a controlled setting. Based on this criterion, the participants were further short listed to 33 participants who scored B in their English tests.

In the next stage of participant selection, only participants with adequate cultural knowledge of their own culture and with either minimal or no cultural knowledge of other cultures were selected. 13 participants were dropped from this selection of participants and the remaining 20 participants were tested on their ability in retelling using the written form. Only participants who scored between 8 to 10 marks in the retelling written assessment were selected to ensure that the outcome of the study was not affected by the participants' lack of retelling ability in the written form.

After going through all the selection process, a total of 15 participants, between the age group of 11 - 12 years old, were selected as samples. Five of them were Indian whose native language (L1) were Tamil, five Malays with Malay Language as their native language (L1), and five Chinese with Cantonese as their native language. The participants were grouped according to their ethnicities.

The total number of 15 participants was considered adequate for the purpose of this study based on the criteria related to good students' proficiency, cultural backgrounds and ability to do retelling as a form of assessing their reading comprehension. In addition, the small number of participants enabled the researchers to build good rapport for them to be more open and frank in their responses during the interviews. This approach is in line with Crouch and Mackenzie (2006) who proposed that a researcher can build and maintain a close relationship

when there are less than 20 participants in a study. Besides that, the approach can alleviate validity threats such as bias.

### 3.3 Research Procedures

This research was conducted in three stages, each stage for each text type: narrative, descriptive and info graphic. In each stage, the cultural texts were given to the participants to read and they had to retell the text in writing as well as answered comprehension questions based on the text. The same process was repeated in all the stages. During the retelling sessions, participants were given the freedom to add their own ideas relevant to the text. Finally in the third stage, an interview was carried out with each participant to find out more on the participants' opinions on various types of text and their comprehension of those texts. The analysis of the retelling assessment and comprehension test scores were used to confirm which types of texts affect reading comprehension. The analysis of the interview transcriptions were used to find out how cultural based text types influence reading comprehension.

### 3.4 Research Instruments

#### 3.4.1 Reading texts

Nine cultural texts: three narratives, three descriptives and three info graphics were chosen on the basis of theme, length and difficulty. All texts encompass of various cultural themes in Malaysia: three Malay cultural texts (The Sacrifice, The Malay Wedding, and Hari Raya Aidilfitri), three Chinese cultural texts (Moon cake Festival, The Chinese Wedding, and Change) and three Indian cultural texts (Ponggal Celebrations, The Indian Wedding, and Diwali). This is illustrated in Table 1.

Table 1: Categorisation of texts

| TEXT FORMAT  | CULTURAL TEXT TYPES  |                     |                      |
|--------------|----------------------|---------------------|----------------------|
|              | MALAY TEXT           | CHINESE TEXT        | INDIAN TEXT          |
| DESCRIPTIVE  | The Malay Wedding    | Mooncake Festival   | Ponggal Celebrations |
| NARRATIVE    | The Sacrifice        | Chang'e             | Diwali               |
| INFO GRAPHIC | Hari Raya Aidilfitri | The Chinese Wedding | The Indian Wedding   |



### **3.4.2 Retelling assessment**

Retelling assessment is used in this research in order to probe into the true representation of students' reading comprehension and interpretation. The participants were grouped into three groups based on their ethnicities to read the cultural texts. After ten minutes, the participants were requested to write what they remembered in the written retelling assessment form. They were given the freedom to express their opinions in their own words and also to add other information they felt relevant to the text. No time limit was fixed and the participants were allowed to write at their own speed.

### **3.4.3 Comprehension test**

According to Lee (2015), comprehension tests are among the most frequent type of comprehension assessment. The comprehension tests in this study comprise six multiple-choice questions. The question-answer relationship (QAR) model by Raphael (1984) was used to develop the comprehension questions.

The model is useful in ensuring that the questions can yield the information needed (Leavitt, 2012). The QAR model used is the text-explicit and text-implicit questions model. Text-explicit questions are literal and reorganisation questions. On the other hand, questions that require readers to infer, predict, evaluate, and give a personal responses are categorised as text-implicit (Charun, 2012). These two types of questions are appropriate as they are typically used for assessment in schools and they are commonly found in the Malaysian primary school textbooks.

Besides that, the format of the comprehension test was designed based on the new UPSR format. This approach was to ensure that the participants were familiar with the question format and that they would not be negatively affected by the format. The researcher prepared six multiple-choice questions consisting of text explicit and text implicit questions for each text. Gillam, Fargo, Petersen, and Clark (2012) used similar design for comprehension assessment to assess the comprehension of expository texts among the fourth graders. Another research by Carlson, Seipel, and McMaster (2014) have also used similar design with five inferential questions and five literal questions to assess the comprehension of elementary students.

The researchers did not include subjective comprehension questions in the comprehension test to avoid excessive pressure on the participants as they had to complete the retelling assessment beforehand. It is believed that extra pressure and burden might affect the participants' performance in the comprehension test. This statement is supported by Lee and

Pulido (2016) who have asserted that human working memory is limited in capacity and too much demand can overload the cognitive system and thus can cause inefficient processing of the reading task.

#### **3.4.4 Interview questions**

A semi-structured interview was carried out to investigate how different cultural schemata influence the participants' cognitive reading processes. In addition to this, the purpose of the interview was also to collect data for comparison and compensation purpose in regards to other research instruments used: retelling assessment and comprehension test. All the data collected from these instruments were then triangulated to obtain an in-depth understanding of what transpired during the reading sessions. The responses gathered from the interview questions were used to make the connection on how the present schemata were used, how it affected the comprehension, and how the schema has changed from the students' perspectives.

The interview was conducted individually to ensure that the participants' responses were not influenced by other peers. The open-ended interview questions asked the participants on their prior knowledge, the difficulty level of the text, the reasons for the difficulty, their ability to expand the topic, and the information gained from reading the culturally unfamiliar text

#### **3.5 Data Collection Procedure**

There are five stages in the data collection procedure. The data collection was conducted within the duration of six weeks, and each stage took approximately one week to be completed. The first stage was allocated for the administration of the diagnostic tests on prior knowledge assessment and retelling knowledge assessment. These two assessments were used to choose the participants suitable for this study.

The chosen participants moved to Stage 2 in which the participants went through three reading sessions of narrative texts. In each session, the participants were tested on narrative texts regarding different cultures (Malay, Chinese, and Indian). In the first session, they were given a narrative text on Malay culture and they need to record the time taken to read the text. Then, the participants were requested to retell by writing down what they remembered. After a short break, the participants had to answer the comprehension test. In the next two sessions, the same steps were administered. Session 2 tested on Chinese culture and session 3 tested on the Indian culture.

In the third week, the participants moved to Stage 3 which was allocated for descriptive texts. The participants went through three sessions on different cultural texts for each session. Stage 4 repeated the same procedure for info graphic texts. Finally, in Stage 5 the interview sessions were conducted.

### **3.6 Data Analysis Procedure**

The data analysis procedure was carried in four sets: analysis of retelling assessment scores, comprehension test scores, comparison of both retelling and comprehension scores and finally analysis of interview questions transcription. The main and subsidiary points of participants' written retelling of the texts task sheet were colour coded based on the rubrics prepared for the retelling assessment. Each correct point was awarded one mark. Additional points relevant to the text were awarded one mark. Besides that, inaccuracies in the written retelling task sheet were also colour coded differently. Then, all the scores were totalled and tabulated under three categories: points from the text, additional relevant points, and number of inaccuracies.

The comprehension tests were marked based on correct answers. Each correct answer was given one mark and the total score was calculated. An analysis comparing both the retelling assessment and comprehension test scores was conducted. The scores were tabulated according to the types of texts: narrative, descriptive, and info graphic. All three types of scores (retelling assessment, comprehension test scores and the comparison) were analysed to identify which type of cultural-based text format affected the participants' reading comprehension.

The responses from the interview questions were transcribed, coded for similarities and categorised into the themes. The categorised themes were used to determine how cultural-based text have affected the participants reading comprehension and schema. The test scores and responses from participants were triangulated to obtain an in-depth understanding of what transpired during the reading sessions.

## **4.0 FINDINGS AND DISCUSSION**

Both comprehension and retelling assessment percentage scores are tabulated according to the three text types: narrative, descriptive and info graphic. Then bar graphs are projected from these scores to enable easy comparison of the texts. Finally these data are triangulated with the interview transcriptions analysis.

Figure1 shows all the participants average comprehension test scores based on the type of text: descriptive, info graphic and narrative. Three participants S1, S4 and S9 scored the highest average score for the info graphic texts. Seven participants, S2, S3, S5, S6, S7, S8

and S10 scored equally for both info graphic and narrative texts. Two participants S11 and S12 recorded equal average scores for all three texts.

#### 4.1 Findings Pertaining to Reading Comprehension Test Scores Analysis

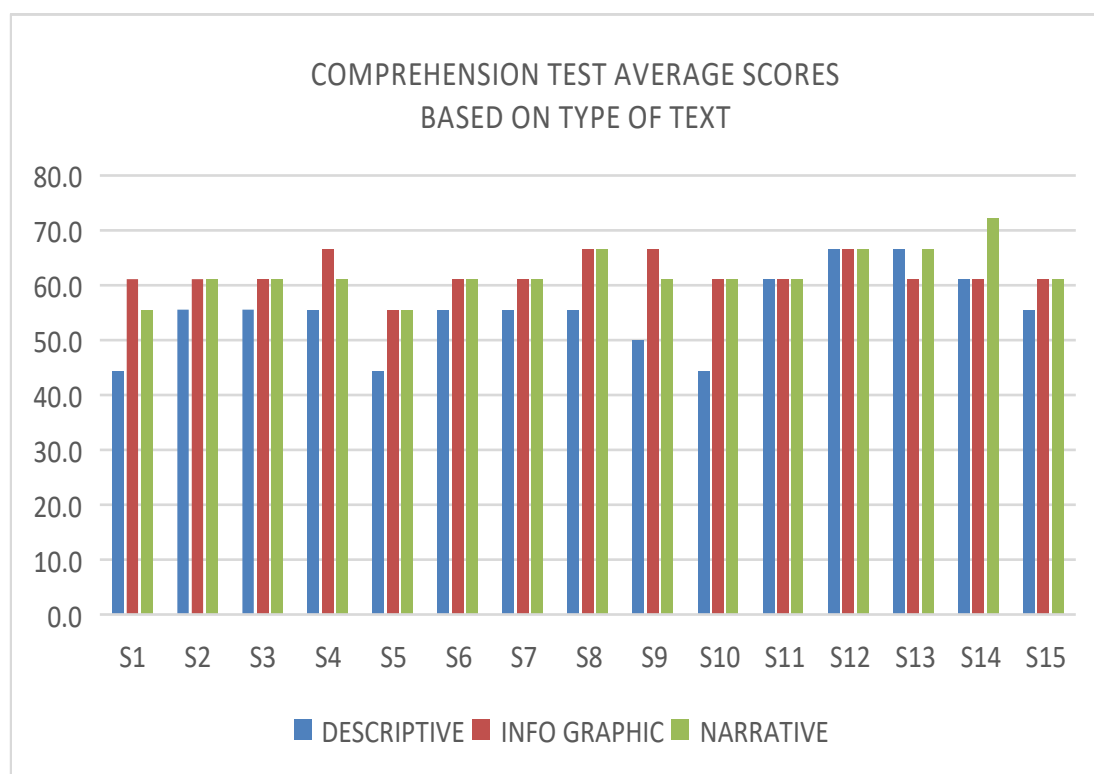


Figure 1: Comparison of comprehension test average scores based on type of text

Based on the bar graph in Figure 1, other than participants S11 and S12, all the other 13 participants recorded the least average scored for the descriptive texts. These findings confirmed that when it comes to comprehension assessment, participants were able to perform better in info graphic texts which are simple and they contained direct information with pictures to aid comprehension of the text. Narrative texts which provide story lines have also enabled the participants to comprehend the text and answer the comprehension questions. However, lengthy paragraphs full of information, which is the main element in descriptive texts, posed problems for the participants as they had to search for answers in the paragraphs. In comparison with the comprehension test average scores, the retelling assessment average scores showed a different finding.

## 4.2 Findings Pertaining to Retelling Assessment Scores Analysis

Figure 2 shows that all the participants scored better in the narrative text and not in the info graphic text compared to the findings for the comprehension test scores. When descriptive texts and info graphic texts were compared, 10 out of 15 participants scored better for the info graphic texts. Only 5 participants performed better in the descriptive texts. Based on these findings, it can be surmised that when it comes to comprehension test scores, the participants performed well when reading the info graphic text. On the contrary, they performed better when reading the narrative text during the retelling assessment.

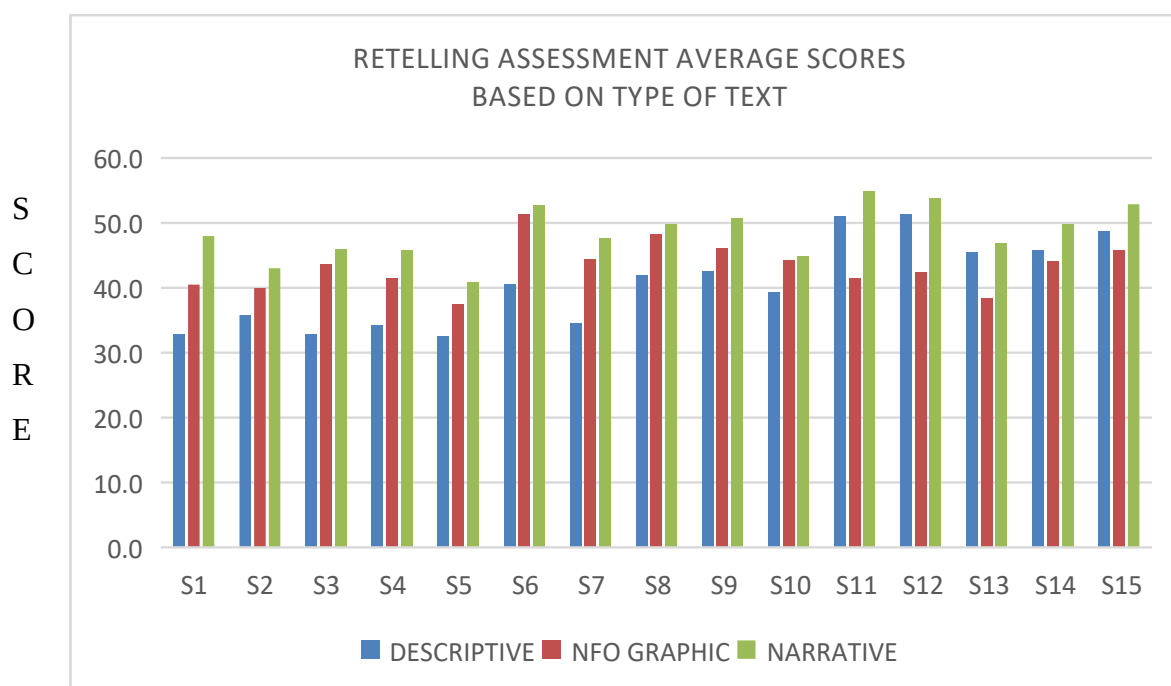


Figure 2: Comparison of retelling assessment average scores based on type of text format

## 4.3 Findings Pertaining to Interview Transcription Analysis

The responses gathered from the participants were varied for all types of texts and thus a straightforward conclusion cannot be obtained on which text types influenced participants' reading comprehension. A deeper analysis of their responses have revealed a few interesting points that need to be highlighted in this study.

For the Malay text, the descriptive text on the Malay Wedding was viewed as the most difficult text by all the participants. The info graphic text on Hari Raya Aidilfitri was viewed as the easiest text. On the other hand, among the Chinese texts, all the participants found the info graphic text on the Chinese Wedding as the hardest text and the narrative text on Chang'e the easiest. As for the Indian texts, there were some discrepancies among the participants'

responses. The Malay and Chinese participants viewed that the descriptive Indian text on the Ponggal Celebrations as the toughest and the info graphic text on the Indian Wedding as the easiest. On the contrary, the Indian participants chose the info graphic Indian Wedding as the toughest and the narrative text on Ponggal Celebrations as the easiest. A closer analysis of their responses revealed a more in-depth realization of what actually transpired during their reading and interpretation sessions. Two elements were evident in their responses.

Firstly, there was a mismatch of new and old schema, and secondly first-hand experience seems to have a stronger hold in their cultural schema. The Indian participants found that the ‘Indian Wedding’ text despite being info graphic did not match to their cultural schemata as the Indian wedding described in the text was more relevant to the North Indian style of wedding. On the other hand, the Indian participants were all from the South Indian origin and did not exactly practice everything mentioned in the text. Hence, there was a mismatch between the stored schema and the new schema which created confusion, and thus hamper their comprehension. Despite having watched Bollywood movies which have the wedding theme, their personal experience on the Tamil wedding seemed to have taken a stronger hold on their schema. Hence, when they read the text on the Indian wedding the assimilation process did not trigger the existing schema thus creating a mismatch of schema.

The following transcription excerpts show evidences of the participants’ choice of text and the reasons stated by them:

*“.....For me I found the Indian wedding very different from what I have seen in my uncle’s wedding....”(Indian Participant S12)*

*“.....I couldn’t recall the factual text....” (Chinese Participant S9)*

*“....The text on the Malay wedding was too long and too much information. I had to reread it many times to get a clearer picture.” (Indian Participant S11)*

*“I didn’t like reading about the Malay wedding. Too complicated process.”  
(Indian Participant S13)*

*“....Well...I celebrate it. I practice it. So it was easy for me to understand”  
(Malay Participant S5)*

*“....Texts should be more like the Hari Raya text. Lots of pictures and less words.”*  
(Malay Participant S4)

*“....I loved reading the text on Hari Raya. Short simple paragraphs with pictures to help to understand.”* (Malay Participant S5)

*“....Definitely Chinese Wedding. Too complicated even though there were pictures. I have not attended the real Chinese Wedding. My parents usually take me to wedding dinners. There I don't see all these rituals. So it was hard to follow*  
(Chinese Participant S10)

*“...Chinese wedding was the hardest. Too much information”* (Indian Participant S14)

With reference to the above discussion, the analysis summary of the participants' responses is presented in a table form to provide a better understanding of the emerging themes which influence reading comprehension (refer to Table 2).

Table 2: Summary of findings related to type of text format

|                              | MALAY TEXT                                                                                                             |                                 | CHINESE TEXT                                                    |                                                                             | INDIAN TEXT                                                                                   |                                                                             |
|------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
|                              | DIFFICULT                                                                                                              | EASY                            | DIFFICULT                                                       | EASY                                                                        | DIFFICULT                                                                                     | EASY                                                                        |
| <b>MALAY PARTICIPANTS</b>    | <b>Malay Wedding (Descriptive)</b>                                                                                     | Hari Raya (Info graphic)        | <b>Chinese Wedding (info graphic)</b>                           | Chang'e (Narrative)                                                         | <b>Ponggal (Descriptive)</b>                                                                  | Indian Wedding (Info graphic)                                               |
|                              | -too much info<br>-complicated process<br>-unaware of own culture (non-existence of schema)                            | -existence of schema            | -too much info<br>-unfamiliar content (non-existence of schema) | -story like easy to remember                                                | -never heard before (non-existence of schema)                                                 | -have seen on TV (existence of schema)<br>-activation of appropriate schema |
| <b>CHINESES PARTICIPANTS</b> | <b>Malay Wedding (Descriptive)</b>                                                                                     | Hari Raya (Info graphic)        | <b>Chinese Wedding (info graphic)</b>                           | Chang'e (Narrative)                                                         | <b>Ponggal (Descriptive)</b>                                                                  | Indian Wedding (Info graphic)                                               |
|                              | -too much info<br>-complicated process<br>-unfamiliar content (non-existence of schema)                                | -graphics                       | -unaware of own culture (non-existence of schema)               | -story like easy to remember<br>-heard stories before (existence of schema) | -never heard before (non-existence of schema)                                                 | -have seen on TV (existence of schema)<br>-activation of appropriate schema |
| <b>INDIAN PARTICIPANTS</b>   | <b>Malay Wedding (Descriptive)</b>                                                                                     | <b>Hari Raya (Info graphic)</b> | <b>Chinese Wedding (info graphic)</b>                           | Chang'e (Narrative)                                                         | Indian Wedding (Info graphic)                                                                 | <b>Ponggal (Descriptive)</b>                                                |
|                              | -too much info<br>-complicated process<br>-unfamiliar content (non-existence of schema)                                | -graphics                       | -too much info<br>-unfamiliar content (non-existence of schema) | -story like easy to remember                                                | -have seen on TV but own experience different (mismatch & inactivation of appropriate schema) | -own experience (existence of schema)                                       |
| <b>THEMES IDENTIFIED</b>     | 1. THE EXISTENCE AND NON-EXISTENCE OF SCHEMATA<br>2. THE ACTIVATION OF APPROPRIATE SCHEMATA<br>3. PRESENTATION OF TEXT |                                 |                                                                 |                                                                             |                                                                                               |                                                                             |



#### **4.4 Discussions**

The findings on the scores obtained by the participants in the retelling assessment and the comprehension test have resulted in different interpretations. Based on the comprehension test scores, we can summarize that participants were able to answer comprehension questions better if the text was presented in info graphic format. However during the retelling session, it was found that they could retell better with narrative texts which were more story based. It was found that descriptive texts were not the favourite choice among these participants as these types of texts contain a lot of information which caused comprehension problems among the participants.

On the contrary, findings from the interview have revealed different opinions from the participants. There was no definite answer as to which text type was harder or easier to comprehend. There were a few interesting points which can be summarized from the findings. Firstly, there is an important element that can be noted in the responses given by the participants on the Chinese text and the Malay text. All the participants found that the info graphic text (Hari Raya Aidilfitri) easier to comprehend compared to the other two types of text: narrative and descriptive. They reasoned that the pictures helped them in their understanding and interpretation. In addition they had some prior knowledge about the content from reading books. However, they found that the info graphic text on 'The Chinese Wedding' difficult although there were pictures. They reasoned that although the pictures helped with their comprehension but they still struggled to grasp the meaning of the text as they were not familiar with the content as they had no prior knowledge. This proves that the existence of prior knowledge or schema is important in determining the comprehensibility of a text, and that the type of text only plays a secondary role in the process of interpretation.

This support many Malaysian studies, conducted by Shadower, Ottoman, and Pang (2016) and Abdelaal and Sase (2014), which have shown strong relationship between high prior knowledge and reading comprehension. The reason why some readers are able to comprehend passages better than the others lie in the schemata where they organize meaning from the text. With the appropriate schemata, the participants are able to recall more information because there is a close match between their schemata and the text. As pointed out by Carrell (2013), it is easier for readers to read text which has familiar cultural content compared to text with unfamiliar cultural content. Readers can understand the text better if the content is closely related to their own experiences and practices (Shadower et al., 2016).

Secondly, the responses gathered for the Indian text was totally unexpected as students from all ethnicities involved seem to have different views of which texts were hard and easy.

The Malay and Chinese participants said that the descriptive text 'Ponggal' as the hardest text but according to the Indian participants this 'Ponggal' text was the easiest. The text that the Malay and Chinese participants found easy was the 'Indian wedding'. However, this text was the toughest for the Indian participants. Based on these responses, it can be said that cultural schema has an influence on the readers' comprehension and interpretation. This is in line with Liu (2015) who views that schema is the abstract organized previously acquired knowledge structures, which is in the form of concepts, beliefs, expectations or opinions stored in memory. Readers make use of this schema to make sense of the text. However, schema alone is not enough for comprehension and interpretation. The existence of the relevant schema to support the comprehension of a text is more important. This analysis supports Offenbach and Chi (2011) who claims that comprehension is closely related to the schema theory as comprehension is actually putting in some new information and searching for the schemata that matches the new information. When the relevant schemata or background knowledge are found, then only it can be said that comprehension has taken place. Furthermore, Li and Lai (2012) have explained that lack of necessary background knowledge about a topic is one of the "inside-the-head" factors that impede reading comprehension.

From this we can conclude that reading comprehension involves activation of ideas based on prior experiences stored in the memory. It involves bringing an individual's entire life of experience and all of individual's thinking power to bear in understanding what the writer has encoded. Situations depicted in words on a page stimulate and activate the memory of these experiences and bring meaning to reading. Thus, prior sensory experiences stored as schemata provide the basis for comprehending what is read. Thus, the current study supports the results of the studies by Carrell (2013), Charun (2012), Barman (2013), Al-Mahrooqi (2013), and Davoudi and Ramezani (2014). These studies have highlighted the critical role of schema theory and the activation of appropriate schema in reading comprehension and that the lack of such knowledge may impede comprehension of the texts.

From the above presentation of the findings, there are three main factors which influence participants' reading comprehension

***a) The existence or non-existence of cultural schemata***

This is the main factor in reading comprehension. The existence or non-existence of cultural schemata determines the comprehension ability. If the cultural schemata needed to comprehend a text exist then the comprehension will be faster and easier. However, if the schemata does not exist, comprehension will be hampered. Thus the existence of cultural knowledge is

important for interpretation and comprehension of a cultural text. This schema can be acquired in multiple ways such as life experiences, reading and listening and watching from various sources. Of these, life experiences have a stronger hold in the schemata as the experience itself encompasses utilizing all sensory organs to create a three dimension view of the whole event unlike reading and listening that only involves one sensory organ. From this we can conclude that experience provides a strong schema that aids comprehension of texts.

***b) The activation or non-activation of appropriate schemata***

Existence of cultural schemata alone is not sufficient to enable proper understanding and interpretation of a text. The need for the activation of the appropriate cultural schemata is the master key to better understanding when reading a cultural text. The current study proves that the assumption being in the same culture will facilitate understanding a cultural text is not justified. Being in the same culture is not sufficient to ensure better understanding of the cultural text. Triggering the appropriate schema plays a crucial role in understanding and interpreting a cultural text. This will determine whether a mismatch of new and old schema has or has not occurred. A mismatch schemata hinders comprehension as proven in this study.

***c) The presentation of text***

Although the presentation of a text is not the main factor in reading comprehension, how a text is presented plays a minor role in aiding comprehension. Presentation of a text comprises the amount of information, the length, the coherence in the text, and additional elements such as graphics. The pictures in the info graphic text trigger the memory which is stored as schema in their brain capacity. This enables comprehension to take place easily. Texts which have simple short paragraphs help comprehension compared to texts with long paragraphs which do not entice the mind to read and automatically gives a mental block which hinders comprehension. As there is too much information, rereading the text many times is required and this consumes time. Subsequently, this reading process overloads the brain capacity thus creating a mental block that does not facilitate recalling or remembering of all facts read in the text. The coherence of a text enables proper storage of information in the brain. Thus narrative texts which have a story line and which do not have too much factual information are better preferred by the participants.

## 5.0 CONCLUSION

Based on the findings and discussions of this study, it can be concluded that reading comprehension is influenced by three main factors which are the existence or non-existence of cultural schemata, the activation or non-activation of appropriate schemata, and the presentation of the text.

The findings proved that existence or non-existence of cultural schema has an impact on reading comprehension and recall. The analysis of the retelling process and the comprehension tests revealed that appropriate cultural schema influenced reading comprehension and interpretation as well as the retelling of the texts. It can be concluded that cultural familiarisation of a text has a significant effect on reading comprehension, recall, and retelling. The participants can comprehend and remember texts which are compatible with their culture. When provided with culturally familiar text, participants did not encounter unfamiliar content which impeded reading. Hence, they can use automatic processes as they are familiar with the background of the text. On the other hand, culturally unfamiliar text readers have got to use controlled processes that require greater effort for comprehension. Thus, the results are in support that schema theory of a person's background knowledge has an effect on the memory, reading comprehension, interpretation, and reading rate.

In addition, the successful activation of the relevant schema is another formidable factor for better comprehension of texts. The current study proved that triggering the appropriate schema played a role in understanding and interpreting a cultural text. The triggered schema can determine whether there was a mismatch of schema that can hinder comprehension. However, such mismatch can also induce the acceptance of new information which in turn can contribute to the expansion of the old schema. This expansion of the old schema will give the existing schema a new form which can be utilised in future readings.

Finally, the findings of the current study revealed that the text format is not the main factor for comprehension. However, it has a secondary role in aiding comprehension. Elements such as texts with simple short paragraphs as well as ideas that are well organised and aided with pictures facilitated comprehension to a certain extent.

In conclusion, the current study supported schema theory that a person's background knowledge influences the comprehension and interpretation of a text. In addition to schema, the type of text format also plays a minor role in reading comprehension.

The current study does not take into consideration the reading processes involved in reading comprehension but solely study on the impact of cultural based text type in reading comprehension. When readers face a difficult text, they do not stop reading but instead they try

to use other strategies which will assist them in comprehending the text. There is a possibility of other strategies playing a significant role in comprehension of cultural texts. This study implicates the needs to investigate the reading strategies used by students when reading a cultural based text to further understand the reading processes which occur while reading a text.

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