IELTS ACADEMIC READING MODULE TEST: VALIDITY AND RELIABILITY

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ABSTRACT: *The testing of reading comprehension seems deceptively simple when compared to the testing of other abilities. The basic problem is that the language tester is expected to set tasks that will not only lead the candidate to use reading skills but will also result in behavior that provides clear evidence of the successful use of those skills. This paper aims to evaluate the IELTS Academic Reading Module Test in detail, examining its validity and reliability and discussing how far its format, operations, conditions, and techniques meet its purpose. The paper focuses mainly on the test scoring rules, which appear to be strict in terms of spelling, grammar, and the number of words required for written responses. It concludes with some recommendations on ways in which the validity and reliability of IELTS reading scoring rules could be improved.*

KEYWORDS: IELTS Academic Reading Module Test, Format, Operations, Conditions Validity, Reliability, Scoring Rules, Evaluation.

INTRODUCTION

In the past decade, the issue of testing reading comprehension has taken place in a debate between language teachers concerning the mistrust of the test quality which seems to have a negative effect on language teaching and learning activities (Hughes, 2003). This issue has grown in importance in light of recent discussions about the content and techniques of the reading test in order to produce a measurement tool that can give an accurate reflection of students' ability to extract the main ideas from the reading text (Weir, 2005). In his analysis, Hughes (2003) claims that in testing reading, testers need to take into account the skills that are involved in the reading process and that are appropriate to the purpose of the test.

Moreover, the process of designing a good reading test requires a clear understanding of both validity and reliability of the test format. The test is said to have content validity if it measures exactly what it is intended to measure in students. However, the test can be reliable if it gives consistent results for the same performance ((McNamara, 2000, Lillely, 2005)

This paper critically tries to give a detailed evaluation of the Academic Reading section of the International English Language Testing System (IELTS). Specifically, it discusses the test framework, format, validity and reliability.

The nature of the IELTS test

IELTS is broadly used to assess the language proficiency levels of candidates wishing to study or train where English is the medium of communication (Clapham, 1996, Charge & Taylor, 1997, and IELTS: Information for candidates, 2011). IELTS is 'owned' and managed by three associations, The British Council, The University of Cambridge Local Examinations Syndicate, and IDP Education Australia: IELTS Australia (Cambridge IELTS3, 2005: 1). The test consists of four modules: that is - listening, reading, writing, and speaking. However, while

all candidates take the same listening and speaking modules, reading and writing modules are available in two formats: the Academic Module and the General Training Module. (Charge &, Taylor 1997). The Academic Reading and Writing Module is specified for assessing the English proficiency level of those wishing to join English medium universities or colleges at undergraduate or post graduate level. (Clapham, 1996, IELTS: Information for candidates, 2011)

The specific purpose of the Academic Reading Module, however, is to test the reading skills of the candidates who read three passages graded in difficulty in order to answer a total of 40 questions in a relatively short period of time. (Jakeman & McDowell, 2001:28).

Framework of Academic Reading test in IELTS

Operations - In the light of the type of texts used and questions asked in this module, candidates appear to be expected to carry out a number of operations; these can be divided into two types: expeditions and careful reading operations.

Expedition reading operations

Skimming: for this test candidates need to quickly survey the text to obtain a general understanding of the main ideas and then identify the appropriate paragraph which had to be read more carefully in order to answer specific questions.

Scanning: the test includes questions where candidates are expected to use their skills to scan the passage to find specific information, i.e. the name of a place, specific words or phrases, figures, percentages or dates. (Hughes (2003:138).

Careful reading operations:

Distinguishing fact from opinion and recognizing an author's attitude: the IELTS test includes texts which are completely factual and others which include arguments or opinions. Candidates are tested on their ability to distinguish and understand these points from the texts. (Jakeman &McDowell, 2001).

Understand inferred information: some questions may include statements which are paraphrased differently from the original texts. Candidates are expected to deduce the meaning of these phrases in order to arrive at the appropriate answers. (Jakeman & McDowell, 2001).

Infer the meaning of unknown words from contexts: as the texts include a number of unfamiliar words, candidates are expected to use various strategies of identify the meaning of unknown words; i.e. "*inference through context, or word-formation*" (Grellet, 1986:12).

Conditions

Reading purpose: The main purpose of reading in a test situation is to get the relevant information necessary to answer the questions in the test. In the IELTS test situation, however, it appears that the chosen texts deal with topics related to candidates' future target use and relevant to their background knowledge. This may help candidates to deal with the given texts better. (Weir, 1993:66)

Nature of texts

Text types - IELTS Academic Reading texts include articles and reports taken from a variety of authentic sources such as newspapers, magazines, books and journals.[1] As mentioned earlier, the selected texts deal with a number of topics related to the language target situation and relevant to candidates from different fields. The common topics that usually arise in IELTS may include education, social sciences or problems, the environment, technology, political issues also life and health sciences. (Clapham, 1996: 62 , British Council, 2011)

Organizational structure - As the IELTS Academic Reading test is for students at a high proficiency level, the texts are carefully selected from a range of well organized texts that are used to test various reading skills. The texts are usually divided into 3 sections, i.e. introduction, main body of text, conclusion, candidates are thus able to follow the text easily. (British Council, Riyadh 2011) The chosen passages are written in a number of styles that suit the purpose of the test i.e. narrative, argumentative, and process description. (Jakeman & McDowell, 2001:28) (See the appendix)

Propositional feature - The texts used in this test are not intended for specialists, they deal with a variety of general issues which are assumed to be appropriate to the background knowledge of postgraduate or undergraduate level candidates who wish to take English speaking university courses.[2] Nevertheless, it is common to find a number of unknown lexical items within these texts varying from technical and sub-technical vocabulary to other items which candidates may have never come across. However, texts which include technical terms are always accompanied by a glossary of the terms which are thought to be unfamiliar to candidates (IELTS: information for candidates, 2011).

Length - Hughes, (2003) believes that the appropriate length of passages used for testing expeditious reading should average about 2000 words or more, in fact, the 3 passages ranges from 2,150 to 2,750 words.[3] This number is seen to be adequate for testing skills such as expeditious reading where the reader has to go through lengthy passages in order to get the gist of the main ideas or to find specific information.

Channel – Reviewing a number of IELTS sample tests reveal that at least one passage in each test may contain non-verbal material, i.e. pictures, diagrams, graphs, charts and/or illustrations. Some illustrations are used within the passage and others accompany the tasks to clarify questions or are used as part of the question as in the case of diagram completion tasks. Urquhart & Weir, (1998:145) draw attention to the importance of using diagrams to convey information particularly in the case of science texts.

Time available - The IELTS reading module allows 60 minutes to answer 40 questions based on the three reading passages; students are recommended to spend 20 minutes on each passage and are required to write their answers on the answer sheet during this time as they are not given extra time to transfer their answers.[4] Since the test includes testing expeditious reading skills, the time available appears to be appropriate, as students are not expected to read every word in the text. (Hughes, 2003: 141). In this connection, Weir, (1993:68) claims "… if too much time is given candidates may simply read intensively, and questions designed to test

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[1] http://www.cambridgeesol.org/exams/ielts/index.html#acrd

[2] http://www.ielts.org

[3] IELTS Handbook 2007, p7

[4] IELTS Handbook 2007, p7

ability to process text quickly to elicit specified information may no longer activate such operations".

Assistance - All instructions are clearly written in the target language (English) and it is noted that questions may appear before or after passages. Candidates are not allowed to use a dictionary during the test. Rather, if a text contains technical words a glossary is available (IELTS: Information for candidates, 2011).

Method factor/response mode - Candidates are familiar with the type of tasks and environment features (procedures and conditions) in this test since sample tests are available for candidates to practice in advance. Nevertheless, candidates are not allowed to write their answers using their mother tongue. Questions in this test are presented in the same order in which the information appears in the texts. The marks are distributed on the basis that each item being worth one mark[5] but candidates are penalized for incorrect spellings and grammar and also if they exceed the number of words required by the question [6] (British Council- 2011).

Level of performance

Since IELTS is not a fail or pass test and intended to measure candidate's proficiency level of language it uses a banding system of 9.0; university requirements are 6 plus depending on the program candidates wish to pursue. (Tennent, 1998) (See the appendix for IELTS banding system)

Format of IELTS Academic Reading Module Test

In this test, a variety of question types is used including multiple choice, short-answer questions, sentence completion, notes/summary/diagram/flow chart/table completion, identification of writer's views/attitudes/claims, labeling a diagram, choosing suitable paragraph headings from a list, yes/no/not given or true/false/not given, classification, matching lists/phrases.

In the following section, samples of a number of these question types will be shown with explanations of their purposes.

Multiple Choices:

Multiple choice items may take different forms in different tests and for different purposes. For IELTS, this type of questions is usually used to test a number of reading skills including skimming, scanning and intensive reading.

Examples of Multiple Choice Questions:

Example 1[7.]

Choose the appropriate letters A,B, C or D and write them in boxes 23-27 on your answer sheet.
By the mid-1980s, farmers in Denmark

  A) used 50 percent less fertilizer than Dutch farmers

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[5] https://www.teachers.cambridgeesol.org/ts/exams/academicenglish/ielts/academicreading
[6] British Council, Saudi Arabia 2011, (handout)
[7] Cambridge IELTS3, 2005, p46 (test2)

B) used twice as much fertilizer as they had in 1960.
C) applied fertilizer much more frequently than in 1960.
D) *more than doubled the amount of pesticide they used in just 3 years.*

It is clear from this example that students need to quickly scan the text first to identify the appropriate paragraph that includes the specific information regarding *mid-1980s* before they read comprehensively to find the most suitable answer from the options.

Example 2[8]*:*

According to the text which THREE of the following conditions have been scientifically proved to have a psychological effect on humans?
Choose THREE letters A – G and write them in boxes 35 – 37 on your answer sheet.

A) *lack of negative ions*
B) *rainy weather*
C) *food consumption*
D) *high serotonin levels*
E) *sunny weather*
F) *freedom from worry*
G) *lack of counseling facilities*

This question needs a detailed understanding of the passage to see how the meaning has been paraphrased from the original text and to be able to eliminate incorrect options. However, scanning and making inferences are likely the skills needed to find the correct answers in this case.

Example 3[9]: (making inferences)

Choose the appropriate letters A- D and write them in boxes 15 – 17 on your answer sheet.
17   According to the information in the text, intake of nicotine encourages
A) *blood circulation through the body.*
B) *activity of other toxins in the blood.*
C) *formation of blood clots.*
D) *an increase of platelets in the blood.*

This question type is also designed to test candidates' ability to infer and deduce the meaning of what they read especially when the statements used in the question are not directly stated in the text. (Jakeman & McDowell, 2001:55). In this case, candidates need to look at the key words in the question and then read quickly through the text to determine the paragraph that relate to it, they must then read carefully to understand the meaning of the sentences or opinions given in the question by referring to the original text.

Short-answer Questions:

This type of questions is typically related to factual information and intended to test candidates' ability to extract particular information and details from the text in order to answer the

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[8] Cambridge IELTS3, 2005, p72 (test3)
[9] Cambridge IELTS3, 2005, p21 (test1)

questions. Candidates are required to write down their answers using words from the passage in the spaces provided. The instruction usually determines the number of words to be written which can vary from ONE WORD to no more than THREE in each space, in some cases a number or figure could be used as well.

The following are examples of the most common types of the short-answer questions used in IELTS' tests.

Example1[10]:

Choose ONE OR TWO WORDS from Reading Passage 3 for each answer.
Write your answers in boxes 36-39 on your answer sheet.
   36) *A new headmaster of a school who enlarges his office and puts in expensive carpeting is using the office as .....*
   37) *The graduation ceremony in many universities is an important ....*
   38) *The wig which judges wear in UK courts is a ...*
   39) *The parents of students in a school are part of the headmaster's ....*

Example 2[11]:

Complete the table below.
Choose NO MORE THAN THREE WORDS OR A NUMBER from Reading Passage 1 for each answer.
Write your answers in boxes 9-13 on your answer sheet

Spices	Size	Preferred climate	Complementary spices	Start of active period	Number of generations per year
French	2.5cm	Cool	Spanish	late spring	1-2
Spanish	1.25cm	9		10	11
South African ball roller		12	13		

The above examples show that these questions are intended to test a candidate's ability to find the right information and necessary details in texts using a number of skills such as skimming, scanning and reading carefully (Weir, 1993). In this case, candidates must first specify the key words in the questions and then scan the text to determine where these words are mentioned and finally to read the appropriate section carefully to back up their answers (British Council, Riyadh 2011) .

Summarizing (gap filling)

This type of test is used to evaluate candidates' ability to understand the main ideas in a passage as it is designed in a way that it summarizes and covers the most important ideas presented over a wide area of the text (Jakeman & McDowell, 2001:46, Hughes, 2003). In this type of task, the main points are normally paraphrased, in other words, they are not exactly the same as they appear in the original text (Jakeman & McDowell, 2001) and

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[10] Adopted from: Cambridge IELTS3, 2005, p50 (test2
[11] Adopted from: Cambridge IELTS3, 2005, p41 (test2)

therefore candidates need to use their global reading skills such as skimming and scanning as well as making inferences in order to be able to locate the places in the text that related to the summary and then choose the right words to fill the gaps.

Example *:

Questions 35–40

Complete the summary of Reading Passage 3 below. Choose your answers from the box at the bottom of the page and write them in boxes 35–40 on your answer sheet.

NB *There are more words than spaces so you will not use them all. You may use any of the words more than once.*

HOW HAPPY ARE WE?

Example   *Answer*

Our happiness levels are ... **(0)** ... by relatively few factors.   affected

For example, incomes in the States have ... **(35)** ... over the past forty years but happiness levels have ... **(36)** ... over the same period. In fact, people on average incomes are only slightly ... **(37)** ... happy than extremely rich people and a gradual increase in prosperity makes ... **(38)** ... difference to how happy we are. In terms of national wealth, populations of wealthy nations are ... **(39)** ... happier than those who live in poorer countries. Although in some cases this trend is ... **(40)** ... and it appears that other factors need to be considered.

LIST OF WORDS

stopped	slightly	too	great
doubled	significant	similar	some
stabilised	remarkably	reversed	dropped
no	less	much	affected
crept up	slowed down	more	clearly

*(Adopted from: Jakeman, V & McDowell, C, 2001, Insight into IELTS)

Labeling a Diagram:

This question type is intended to assess candidates' ability to extract specific information from the text in order to label the diagram, therefore, candidates need to scan the text to determine the area that describes the machine and then read for details. (Jakeman & McDowell, 2001:35)
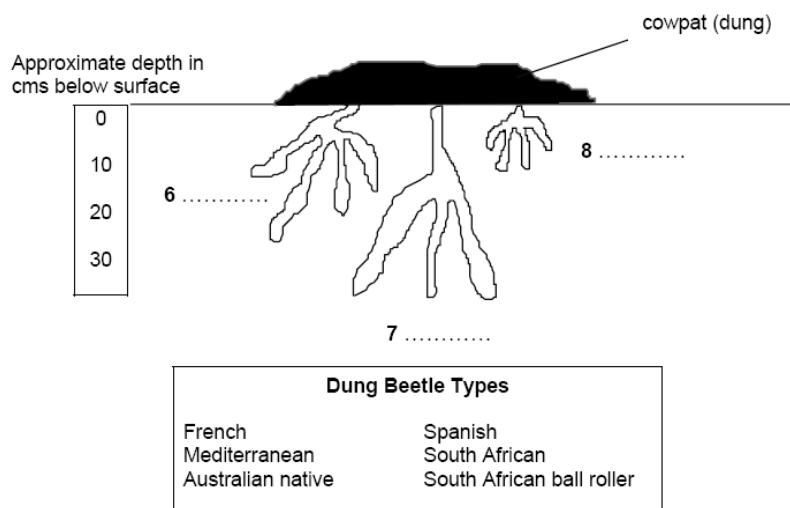
Example[12]:

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[12] http://www.ielts.org/

Questions 6 – 8
Label the tunnels on the diagram below using words from the box.
Write your answers in boxes 6-8 on your answer sheet.

(Adopted from: http://www.ielts.org/) *2011*

Choosing Headings for Paragraphs or Sections of a Text:

This question type is intended to test a number of reading skills. Candidates first need to understand the main idea of the provided headings before they skim the passage to grasp the main idea of the text, they must then read carefully through each paragraph again and select the appropriate heading for each paragraph (British Council, Riyadh 2011).

Example[13]:

Reading Passage 3 has sex sections A-F
Choose the correct heading for sections A-E from the list of heading below.
Write the correct numbers i-x in boxes 28-32 on your answer sheet.

28   Section A
29 Section B
30 Section C
31 Section D
32 Section E

> **List of Headings**
> i   Contrary indications
> ii   Europe's Alpine glaciers
> iii Growing consensus on seal level
> iv   Ice cap observation
> v   Causes of rising sea levels
> vi   Panel on Climate Change
> vii Sea level monitoring difficulties
> viii Group response to alarming predictions
> ix   Stockholm and Scandinavia
> x   The world 130,000 years ago

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[13] (Adopted from: IELTS: Specimen Materials 2003: p18)

Identification of Writer's Views/Claims or Information in a Text

This type of question is usually used to test candidates' ability to identify a writer's opinions and attitudes as stated in the text (Jakeman & McDowell, 2001:54) also to recognize a number of specific points included in the passage[14]. It should be noted, however, that this type of question is typically used with argumentative texts as they include a variety of arguments on specific topics.

Example[15]:

Do the following statements reflect the opinions of the writer in Reading Passage3?
In boxes 36 -38 on your answer sheet write:
Yes   if the statement reflects the opinion of the writer
No   if the statement contradicts the opinion of the writer
Not given   if it is impossible to say what the writer thinks about it
   20   *Popper says that the scientific method is hypothetic-deductive.*
   21   *If a prediction based on hypothesis is fulfilled, then the hypothesis is confirmed as true.*
   22   *Many people carry out research in a mistaken way.*
   23   *The 'scientific method' is more a way of describing research than a way of doing it.*

Matching

This question type is designed to test candidates' ability to correctly recognize and understand the relationship between the items in a text. Candidates need to be able to scan the passage with the purpose of finding the appropriate information and then to read for details.

Example[16]:

Some of the exhibits at the Department of Ethnography are listed below
(Questions 7 – 12).
The writer gives these exhibits as examples of different collection types.
Match each exhibit with the collection type with which it is associated in Reading Passage 1.
Write the appropriate letters in boxes 7-12 on your answer sheet.
NB You may use any collection type more than once.

Collection Types	
AT	**A**rtefact **T**ypes
EC	**E**volution of **C**eremony
FA	**F**ield **A**ssemblages
SE	**S**ocial **E**xperience
TS	**T**echnical **S**eries

Example	*Answer*
Boats	*AT*

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[14] https://www.teachers.cambridgeesol.org/ts/exams/academicenglish/ielts/academicreading
[15] McDowell & Jakeman, (2001:139) Insight into IELTS
[16] Adopted from: Cambridge IELTS3, 2005, p63 (test3)

7   *Bolivian textiles*
8   *Indian coracles*
9   *airport art*
10   *Artic Kayaks*
11   *necessities of life of an Arabian farmer*
12   *tents from the Middle East*

Test validity:

Weir, (1993:19) states "…a test should test what the writer wants it to test. It should be valid". Therefore, by looking at the type of questions used in this test, it is clear that they coincide with the purpose of the test which is to measure a candidate's proficiency in reading comprehension. The questions have been carefully designed so that the basic reading skills, which include skimming, scanning and intensive reading, can be assessed. However, it is worth mentioning, here, that there is a research and validation group for IELTS which is responsible for monitoring test performances and conducting research to investigate test materials and also to estimate and report on test reliability. As a result, new versions of IELTS modules are released for use by IELTS candidates in all centers every year.[17]

Test reliability:

Hughes, (2003: 50) claims "…to be valid a test must provide consistently accurate measurements. It must be therefore, reliable." According to the 2014 IELTS Annual Review, the reliability of the reading test is measured using Cronbach's alpha for internal consistency of the 40-items used in the test, this indicates that "…the scores achieve acceptable levels of reliability" at 0.90.[18] (See table 1 below)

Table 1. IELTS test reliability by component (2014)

Component	Reliability
Listening	0.91
Academic Reading	0.90

(Quoted from: http://www.ielts.org) *2014*

RECOMMENDATIONS FOR IMPROVING THE IELTS SCORING VALIDITY

A serious weakness with this test is that it considers the errors of spelling and grammar as incorrect. Hughes, (2003:33), argues that if a reading test calls for short written answers and the scoring of these answers "…takes into account spelling and grammar, then it is not valid". Hughes also says that as the reading test is meant to assess reading ability, measuring more than one ability may make "the measurement of the one ability in question less accurate". This view is supported by Urquhart & Weir (1998:152) as cited in Fillmore & Kay (1983) who point out that in a reading test, skills which are not directly "... related to reading should not be tested". Moreover, Bachman, (1990) writes "…in order for a test score to be a meaningful indicator of a particular individual's ability, we must be sure it measures that ability…"

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[17] http://www.cambridgeesol.org/rs_notes/rs_nts10.pdf
[18] https://www.ielts.org/teaching-and-research/test-performance-2014

and "... if test scores are strongly affected by factors other than the ability being tested… they will not be meaningful, and cannot, therefore, provide the basis for valid interpretation".

Another problem with IELTS Academic Reading test is that it is very strict in terms of considering the number of written words required for short answer questions. That is, candidates are penalized if they exceed the number of words required and lose the whole mark even if the answer includes the correct words. For example: "…if a question specifies an answer using NO MORE THAN THREE WORDS and the correct answer is 'black leather coat' the answer 'coat of black leather' is incorrect" (IELTS: Information for candidates, 2011) . These strict rules may affect the validly of the test scores; therefore, a range of semantically acceptable answers should be allowed when marking such questions (Weir, 1993).

It may be the case, therefore, that the strictness of IELTS marking rules could be a major factor affecting the reliability of candidates' performances and final scores. However, more research on these issues need to be undertaken to improve the test scoring system in order to be more consistent with the purpose of the test which must be focused on assessing how well candidates use their reading skills to comprehend what they read regardless of any other considerations.

CONCLUSION

This paper has conducted a detailed evaluation of the IELTS Academic Reading Module Test; the purpose, operation, conditions and the test format have been discussed. It can be concluded that, although the module is regarded as one of the most reliable tools used to assess candidates' reading abilities (Charge & Taylor, 1997) in that it considers the necessary academic reading skills that university students are likely to perform, (Buell, 1992) the test scoring rules which appear to be very strict regarding spelling, grammar and the number of words required for written responses, need to be revised in order to improve the test scoring validly in the light of its proposed purpose.

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