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From Perception to Performance: Establishing the level of Influence of background knowledge in the International English Language Testing System (IELTS) reading section scores, of B1 level students at a public University in Ecuador.

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DEDICATION

This, and all my accomplishments to come are specially dedicated to God, my only and biggest fortitude. I want to also dedicate this project to my mother, who even though far away provided me with all of her support and enthusiasm; which encouraged me to peruse my dreams, regardless the hard times and obstacles that may had interfered.

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Resumen

La investigación dentro del campo de la enseñanza del inglés como segundo idioma ha establecido que la capacidad de los alumnos para comprender e interpretar textos escritos depende no solo de su conocimiento lingüístico, sino también del conocimiento previo del lector sobre el tema de la lectura (Carrell, 1983). No obstante, la precisión de los estudiantes al definir si este conocimiento previo es confiable o no, es lo que no se ha investigado ampliamente.

El objetivo de este estudio es definir si la percepción de los alumnos sobre su familiaridad o conocimiento sobre el tema de una lectura, responde o se alinea con su desempeño en una sección de lectura de un examen IELTS. Los resultados han demostrado que las percepciones de los estudiantes no se alinean con su desempeño. La lectura que decía ser menos familiar para los participantes demostró tener el nivel más alto de precisión entre las respuestas; por lo tanto, lo que los estudiantes creen que saben no es realmente lo que saben. Los resultados también indican que los estudiantes creen que leer constantemente en un idioma extranjero no les ayuda mucho a aprender sobre un tema, sino que les ayuda mucho más a mejorar su vocabulario. Por último, los resultados indicaron que los puntajes de los participantes fueron satisfactorios ignorando el hecho de que la gran mayoría afirmó no estar interesada en los temas presentados en el pasaje de lectura. En general, el estudio demostró que las percepciones de los participantes no reflejaban su desempeño; como afirman López, Pérez y Rodrigues (2011), las percepciones de los alumnos acerca de su conocimiento, no reflejan sus calificaciones en los exámenes.

Palabras clave: Conocimientos previos. Percepción. Comprensión lectora. Desempeño.

Abstract

Research within the ESL (English as a Second Language) field has established that the learners' ability to understand and interpret written texts depends not only on their linguistic knowledge but rather, hinge on the reader's prior knowledge on the topic which is activated during the reading process (Carrell,1983). Nonetheless, learners' accuracy while defining if this prior knowledge is reliable or not, is what has not been extensively researched.

The aim of this study is to define whether learners' perception on their familiarity or knowledge of a readings' topic complies with their performance in a reading section of an IELTS exam. Results have demonstrated that students' perceptions do not align with their performance. The reading passage which claimed to be less familiar to participants demonstrated to have the highest level of accuracy among responses; therefore, what students believe they know about is not actually what they know about. Results also submit that students believe that reading does not help much with learning about a topic but rather highly assist you on enhancing vocabulary. Lastly results indicated that participants' scores were satisfactory ignoring the fact that the vast majority claimed to not be interested in the topics presented in the reading passage. Overall, the study demonstrated that participants' perceptions did not reflect their performance; as stated by Lopez, Perez, and Rodrigues (2011), learners' perceptions on their learning do not echo their scores in exams.

Key words: Background knowledge. Perception. Reading Comprehension. Performance.

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Chapter I: Introduction

Reading is one of the four main skills of language learning. Having the ability to read does not only mean being able to decode written text into spoken words but rather extracting implicit and explicit meaning from the text. Sustaining reading comprehension along a text is what defines if the reader is appreciative to the written text or is only applying linguistic knowledge to decode letters and graphemes (Two, 2000). Many researchers have argued the importance and influence of background knowledge in reading comprehension. While some authors such as Nassaji (2002), defend the schema theory, which climaxes the importance of the interaction among the reader's prior knowledge and the text; there are authors such as McNeil (2011) who sustain that prior knowledge on the texts' topic does not play an effective role when it comes to reading comprehension and establishes that prior knowledge is an independent variable in reading comprehension. Overall, the importance and influence of background knowledge in reading comprehension has been extensively researched and argued; yet the accuracy of readers' awareness of this prior knowledge has been scarcely approached.

Much of the research in ESL has been aimed at defining how much influence prior knowledge has in reading comprehension, compared to the influence of linguistic knowledge. Shapiro (2004), states that having background knowledge on a topic aids readers to accurately and efficiently respond to the text's conveying message. However, the difficult aspect consists in that this knowledge has to be the "correct prior knowledge", otherwise it becomes a misleading implement for readers and then their answers deviate from the expected outcomes of a reading comprehension. Defining or establishing whether what readers claim as prior knowledge is the accurate or correct prior knowledge is something researched sparingly in ESL. Learners'

perception of their knowledge should be and needs to be validated, in order to safely say that they have the sufficient knowledge to understand a text.

Learners may claim they are or are not familiar with a text's topic, but this study seeks to determine whether learners' perspective or perceptions on their prior knowledge complies with their performance in reading comprehension. Persky (2020), sustains that learners' perceptions on what and how much they learn is majorly influenced by their interest in the topic. In other words, he affirms that the more interested they are on a topic, the more they think they have knowledge on the subject. Therefore, it is useful to define whether learners declared prior knowledge is likely to be accurate or sufficient while performing reading comprehension.

This study begins by exposing the concept of reading as a skill, including its strategies and models. It then follows through to describe how English language learners are evaluated on their language proficiency in an IELTS exam. The literature considered in this study relies on the importance of defining the influence of background knowledge in reading comprehension, and students' perceptions on what influences their performance during reading comprehension activities.

In order to determine whether learners' perceptions of their background knowledge comply to their performance in reading comprehension, 28 university foreign English language learners were asked to complete a survey and IELTS reading section mock test. Results among the survey and mock test are expected to serve as evidence as to whether learners perceptions are aligned to their performance.

Chapter II: Theoretical Framework

While acquiring a foreign language, learners are subjected to a line of cognitive processes and skills that serve as assistance to developing sufficiency in the target language. Aydoğan and Akbarov (2014) affirm that the four language skills; listening, reading, writing and speaking, need to be acquired and consolidated by language learners in an integrated manner in order to become fluent English speakers, accurate writers, and sufficient readers. As Oxford (2001) mentions, integrating and developing these skills inside a language teaching classroom, allows students to use the language in a more authentic and natural way. Kumaravadivelu (2002), reiterate this point by explaining that within the ELT field, these skills are commonly taken into consideration for teaching as isolated yet dependent skills which seek to be reached proficiently. Each skill is narrowly linked to a set of strategies; reading strategies, listening strategies, speaking strategies and writing strategies. She mentions that even though these skills may be considered to be taught independently; while teaching them or learning them, they inevitably follow an integrated approach. In other words, if foreign language learners are set to learn and practice a reading skill, they will inevitably be submersed under activities that entail writing, listening, or speaking (pp. 225-227).

2.1 Reading Models

Scholars such as Block (1986), Carrell (1989), and Kong (2006) categorize the main cognitive processes within reading into two groups. The first group responds to local strategies, commonly known as the "bottom-up model of reading" which relates to the letters, words, and text information. On the other hand, we have the "top-down model of reading" or in familiar terms;

the global reading strategies, which are related to background knowledge, text gist, and textual organization.

As stated by Khanam, Zahid, and Mondol (2014), the bottom-up processes focus mainly on sounds, letters, words, sentences, and paragraphs. These processes begin to construct meaning through what is written, often concentrating on the smaller units of meaning. It does not lead to constructing a holistic meaning (p.84). Conversely, these authors settle that top-down approaches focus on the whole text to construct meaning by stimulating prior knowledge and compensating for meanings of unknown vocabulary (p.85). Murtagh (1989) states that "the integration of top-down and bottom-up strategies is a feature of good L2 reading" (p.102).

2.2 Reading Strategies

It has been well established that reading is one of the most effective and popular strategies to accurately learn a foreign or second language since it aids learners to acquire adequate vocabulary, grammar and sentence structure. As Mikulecky (2008), mentions reading comprehension is what English language learners should domain first, since it is the groundwork of every trait and phase within language learning. It is effective to consider reading as a process of interface among word identification, prior knowledge, comprehension strategies and engagement (Cunningham et al., 2004, p.186). Learners who have a lack of language knowledge will most likely rely on reading strategies to get a better understanding and practicality of the language. Reading strategies are cognitive actions used to consolidate reading comprehension and interpretation. These strategies entail a vigorous interaction process among the reader's purpose for reading, prior knowledge, experience, culture, and the text (Hughes, 2007). As stated by Geyte (2011), reading is a skill that improves only through extensive practice, however choosing what to read also plays an important

role. Foreign language learners are commonly exposed to academic reading passages or authentic reading material that may sometimes reflect their interest or familiarity.

Reading strategies play an important role when it comes to reading comprehension among foreign language learners. By using reading strategies, learners are enabled to gain a deeper understanding of the text placed in front of them during the exam. Xue (2019) affirms that reading is a complex activity since it not only requires readers to understand surface structures, such as words or sentences, but rather entails an understanding of what is beyond that; their cultural background, main ideas, writing styles, etc. (p.59).

According to Cohen (2006), test takers relay upon a set of strategies when faced with reading comprehension text such as language learner strategies and test management strategies. Through this, the author confirms that when test takers are faced with reading comprehension questions, for example, they are likely to draw from their repertoire of reading and testing strategies by looking for markers of meaning within the passage (definitions or examples), or disregard options based on vocabulary or discourse markers (pp. 311- 319).

2.3 English Proficiency Test

Having the accurate knowledge and effective use of reading strategies is what Hsu (2008), considers as an indispensable factor when it comes to asserting any language or skill proficiency through reading (p.57). Many scholars agree that English is the leading language of science, technology, and academia; therefore its use and sufficiency has become compulsory among students and professionals all over the world (see e.g. Dimova, Hultgren, & Jensen, 2015; Torres-Olave, 2012). As students or professionals, validating or proving that you are able to understand and use a foreign language adequately and efficiently is essential. This is where language

proficiency tests come into consideration. Currently, there are a number of standardized tests that measure a candidate's level of skill regarding the target language. Although there are many options when it comes to standardized testing, choosing a well-known, efficient, and prestigious language proficiency test is important. Steve D. (2021), suggests that the best way to demonstrate linguistic qualifications in English is through the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS), and the Test of English for International Communication (TOEIC).

2.4 IELTS

Jakeman, and McDowell (2008), describe the IELTS examination as one that aims to test "your ability to read approximately 2,750 words in fairly a short period of time" (p.36). This test is jointly managed by the British Council, Cambridge ESOL Examinations, and IDP Education, Australia. IELTS has two versions: the academic reading module, and the general training module. The British Council (2021), specifies that before considering taking an IELTS exam the test-taker should and must consider what their upcoming life choices will be in order to find the test that serves their purpose. The academic version is meant for students who want to enroll on an undergraduate or postgraduate degrees in an English speaking country, while the general training module is aimed at people who want to migrate to an English speaking country. Due to the participants and aimed audience of this study, the form to be considered will be the academic version; since this study hopes to assist English language teachers and future test takers who are set on following academic courses at a university or similar institution which consider English as their official language. In order to train future test takers to gain that gap in knowledge, or help re consider their awareness of their knowledge on a specific topic, teachers can begin by

understanding and identifying students' perceptions on their background knowledge to define their sufficiency in their performance; especially in reading comprehension.

As explained by Harper Collins publishers (2011), the IELTS exam embarks 4 different modules (listening, reading, writing, and speaking). Each section receives a "band score", and the average of all four scores gives the Overall Band Score. The IELTS test takers do not pass or fail; they receive a score. There is a table of equivalency between the Common European Framework of Reference level and the IETLS Overall Band Score, used to classify the level of the candidate as satisfactory.

Table 1 *Common European Framework of Reference IELTS band score.*

CEFR description	CEFR code	IELTS Band Score
Proficient user	C2	9
(Advanced)	C1	7-8
Independent user	B2	5-6.5
(Intermediate – Upper Intermediate)	B1	4-5

Note. Reprinted from *Reading for IELTS* (1st ed., p6) by E. V. Geyte, 2011, HarperCollins.

Els Van Geyte, an English professor at the University of Birmingham, who prepares her students for the IELTS exam, states that an IELTS's reading section contains texts that are taken from authentic sources which may include narratives, logical arguments, descriptions or discussions (2011). In order to reach a satisfactory participation in the IELTS's reading section Jakeman and McDowell (2008) recommend that test takers be aware of certain reading skills. While going over the reading passages test takers should be able to predict what the text will be about in order to orient themselves, scan for specific detail, skim for general idea, identify main and supporting ideas, and understand the overall purpose/theme of the whole passage.

The IELTS reading section leads test-takers to encounter cognitive processes underlying the academic reading comprehension process. As posed by Weir, C., Hawkey, R., Green, A., & Devi, S. (2009), the reading section in an IELTS exam contains 40 different type of questions which can be categorized as the following types: multiple choice, short-answer questions, sentence completion, summary or table/flow completion, labelling diagrams, choosing headings, locating information, identifying writer's views, claims, or information, classifying, and matching. According to these authors, all of these types of questions elicit from the candidate the ability to recognize or summarize particular points of information, and define or overall understand terms or themes within the text (p.165).

2.5 Background Knowledge

While considering reading comprehension among second language learners, researchers have agreed that having background knowledge of the topic in the text, influences their performance. As stated by Levine and Haus (1985), from California State University, background knowledge is a significant factor that affects reading comprehension and may be even more important than language level in comprehending such material (p.391). The content of the reading passages is carried of cultural-based knowledge, so having awareness of this seems to be the reason behind consistently satisfactory performances. Recent studies have put forward that standardized test are in fact culturally based. Philip Roberts (2017), has argued that the questions in standardized test are always embedded in culture and this automatically creates a disadvantage among students considering their cultural differences. Some students may have a personal or educational background that does not prepare them for this type of test equally to others, causing certain disadvantages when it comes to standardized testing. As Kyung and Darya (2015) state,

standardized tests are officially intended to measure intelligence and general knowledge, nonetheless, they are generated based on the knowledge and values of the majority groups. This inevitably creates bias against minority groups, including gender, race, community status, and persons with different language backgrounds, socioeconomic status, and other culture differences. For example, an IETLS reading section can have cultural variations regarding their reading passage's content which may vary from European, to American, to Australian, etc. Depending on the purpose of the exam (either academic or general training) the content of the test can vary.

Reaching sufficient levels in the reading section of these English proficiency tests can be an overwhelming and frustrating goal, due to its vagueness when it comes to determining what is actually necessary to do in order to reach the intended standards. Xue (2019) reveals that learners have shown low efficiency when it comes to demonstrating their reading comprehension skills. As a solution to this, he proposes that by applying the "schema theory", students can achieve a clear understanding of the texts. The schema theory was initially framed by Bartlett in 1932, who stated that understanding when recalling information happens mainly by dipping in past experiences and referencing to relevant information stored in memory. Such past experience, Bartlett labeled as "schema". According to Nassaji (2002), the schema theory catered future researchers to develop the constructive nature of the reading process where there is an important interaction between the text and the reader's background knowledge (p. 440). Nassaji, who denominates this reading process as the schemata, explains that such process happens when preexisting knowledge stored in memory, maps its way through, to link with the information presented in the text, in order to reach comprehension of that text. As Xue (2019) affirms, language and culture correlate and influence each other. He sustains that students who are learning a foreign

or second language need to be familiar with the topic they are reading about to avoid obstacles in reading comprehension.

2.6 Perceptions

Lin (2002), has settled that there is little literacy on the perceptions foreign language learners' have on their prior knowledge and its influence or role in their reading comprehension skills (p. 175). Pautz (2021), states that humans' perceptions are the way a human senses or understands the reality around them. He sustains that there has always been a relationship between someone's perception and the physical world; however, the issue relays on whether if reality is actually as it appears to be.

Pierleoni (2012), proved that readers intend to always fulfill reading tasks but become aware of their lack of background knowledge, and eventually desist or perform unsatisfactorily. Through his study he confirmed that readers tend to resist reading a text or completing a task because they are mindful of their unawareness or unfamiliarity with the topic (p. 12). When readers feel they have the knowledge over the theme or topic they are reading about they feel self-efficient. The term self-efficacy according to Bandura (1986) means "a sense of confidence regarding the performance of specific tasks (p. 21).

Extensive research has proved that having background knowledge of the topic of the text directly effects reading comprehension (see e.g. Droop and Verhoeven, 1998; Anderson and Pearson 1984; Weber, 1991). Lin (2002), states that even though it has been proven that background knowledge enhances reading comprehension it should be further investigated whether prior knowledge that readers believe they have, is effective and is useful in reading comprehension (p.172).

2.7 Literature Review

Many researchers have confirmed that having background knowledge on the topic or theme of a text assists test-takers or readers to reach satisfactory levels of reading comprehension. Studies do not overlook language knowledge, yet manage to tilt the attention to the importance of having knowledge on the subject, in order to perform well on standardized test that involve exercises of reading comprehension. While reading, readers fit in new information drawn out from the text into their existing framed knowledge or schemata (Wallace, 2001). EFL readers use background knowledge to understand the content of the written text. Having background knowledge makes it possible to form schemata, since new information read by the learner interacts with old knowledge in order to reach reading comprehension (Anderson and Pearson, 1984; Smith, 1994).

2.7.1 Background Knowledge and Reading Comprehension

In a study carried out in the Netherlands, Droop and Verhoeven (1998), studied the role of background knowledge in second language reading comprehension. The participants were 70 elementary Dutch speaking students who were learning English as a second language. In order to identify the influence of background knowledge and linguistic complexity in reading comprehension, participants were given six texts from the curricula which differed in cultural aspects. Some carried content related mostly to Dutch culture, Turkish culture, others to Moroccan, and the rest to Islamic culture. Of course, participants had different family backgrounds therefore, were somewhat familiarized to some aspects of the text and not others. Overall results showed that the students who came from Dutch families scored fairly high in comparison to those who did not. Scores indicated a pattern within the connection of the students' families' culture and text theme. Students who were identified as having Turkish backgrounds did fairly well with those text

which contained Turkish cultural content, and failed at achieving acceptable scores while dealing with text that had no connection to their culture. The authors of this study overall conclude that background knowledge of a cultural context plays a significant role in comprehension of texts, hence meaningfully effects the reading efficiency of children's' reading skills while acquiring a second language.

The International English Language Testing System (IELTS) is actively trying to suppress all forms of cultural bias, therefore it does not officially represent a disadvantage for students who have no connection or awareness of British culture. David S. Wills (2018), sustains in his talk that the IELTS is essentially based upon Western life experience. He mentions examples of questions that refer to certain situations that are common among young British and American Students, but are certainly not familiar among Chinese students or most of the world; hence this does not make it culturally biased. He strongly sustains that anyone, regardless of the country they are from, can straightforwardly read about and understand the topics in an IELTS exam; assuming of course they have the language skill to do so. Wills (2018), assures audience that there is no specialized knowledge required to go about the exam (TED, 2018). IELTS organization declares that "IELTS is recognized as being fair to all test takers, whatever their nationality, cultural background, gender or special needs" ("quality and fairness," n.d.).

2.7.2 Students' Perceptions on what Influences their Reading Comprehension

Studies have also been carried out in order to identify students' perceptions on prior knowledge and its impact in their reading comprehension skills. For instance, Lin (2002) performed a study in China with 400 EFL students. The investigator had participants fill in a questionnaire which brought up participants' perceptions on the role prior knowledge, linguistic knowledge and cultural knowledge has while performing reading comprehension activities in L2.

The questionnaire was divided into three categories: prior linguistic knowledge, conceptual knowledge, and sociocultural knowledge. In order to accommodate any other responses that did not fit well with these categories the author decided to add an extra category named "other factors". Results indicated that EFL students in China strongly believe that their domain in reading comprehension in English derives from knowledge on vocabulary. Participants stated that gaining conceptual and sociocultural knowledge is what actually helps them understand a text in a foreign language. Responses overall, mirrored students' tendency of drifting away from the importance of gaining linguistic knowledge (syntax and formal structures), and more towards acquiring cultural frames of reference, in order to understand a text.

Viriya (2013), conducted a study dedicated to compile EFL perceptions on what factors interfere and make reading comprehension difficult for 32 EFL students from a Thai university. The study involved semi-structured interviews and reflective journals which recorded participants' reading experience after reading English texts (p.203). The majority of compiled data revealed that participants mainly considered lack of vocabulary, pronunciation issues, and L1 interference to be the cause of their difficulty in reading comprehension. While analyzing results Viriya came to notice that students' perceptions on their reading difficulties or factors that affect their performance in reading did not mainly include unawareness or unfamiliarity with the topic. According to their journal entries students expressed they felt prepared and sufficient upon reading activities only if they had domain over vocabulary and linguistic features. Nonetheless, the author believed it was important to recognize that there were 12 participants who wrote in their reflective journal that they felt it was easier to understand a text if they had read about that topic or theme beforehand. These students acknowledged that to them, relying on their previous knowledge or experience with

some topics makes reading easier. Doing so is what participants called "using an effective reading strategy" (p. 212).

Pierleoni (2012), ran an action-research study to determine if students' level of achievement in reading comprehension tasks matched their perceptions of their own reading achievement. The study was conducted with three different elementary school classrooms, in Timbuktu Central School District, in New York. Participants had to fill out a survey that asked them to identify themselves as low, ok, good, or excellent readers. Following the survey, the researcher collected participants' reading achievement scores through teachers. Each classroom teacher had generated a list of current reading levels for each student in their classroom. Results demonstrated that the level of achievement in reading comprehension tasks did not match their perceptions on themselves as readers. The majority of participants through the survey considered themselves as "good readers", nonetheless scored fairly low in their reading achievement tasks. The "good readers" scored less than 50% of the grade in most cases (pp.30-31). This study demonstrates that what learners claim knowing about, may not be reliable since results demonstrated that their perceptions did not correlate with their performance.

As stated above, having the knowledge or familiarity on a topic aids reading comprehension; however, identifying weather or not this background knowledge is reliable and exists is what needs further investigation. Due to the results in Pierleoni's study, it can be concluded that students are often unware and overly confident of their abilities regarding reading comprehension; since they commonly feel they have the ability or sufficiency in reading comprehension, but when it comes to objectively defining weather or not they do, there is no association. According to Ginns & Ellis (2009), the core aspect of learning is the students' own awareness of the process. For that reason, defining weather students are accurately validating their

knowledge is what should first be considered, in order to determine whether this knowledge or familiarity with the topic will aid their reading comprehension.

Chapter III: Research Methodology

The main objective of the present study is to identify whether students' perceptions on their knowledge or familiarity on a subject correlate with their score on a reading section of an IELTS academic exam. This study will be conducted under an exploratory-descriptive research design due to its aim to establish, through primary data collection, a frame of reference when it comes to identifying whether participants' perceptions of their knowledge of a topic correlate with their scores. Brink and Wood (1998), describe that exploratory-descriptive research designs do not have control over the variables or subjects, rather, the data collected contributes to the development of a theory. Klingner and Boardman (2015), have argued that the more someone reads and is familiar with a topic, the easier and accurate the comprehension of the next passage on that topic will be to understand (p.3). Familiarity with a topic positively influences performance when it comes to reading comprehension, but this research aims to establish weather students are accurately aware off that knowledge.

Scores obtained by participants in the mock test; which is the reading section of an IELTS exam will be aligned to their perceptions on their background knowledge of the topics presented in the readings, and their personal background regarding their reading habits and preferences. Since it has been well established above that having background knowledge on a topic influences reading comprehension (Levine & Haus, 1985), the purpose of this study is to evidence if students' perceptions on their background knowledge truly reflect their knowledge and/or relate to their score. For instance, test scores will be compared to their level of familiarity with the topic in order to recognize whether or not their perception is in accordance to their performance. This study aims to determine whether students' perceptions on their familiarity with a topic relate to high or low scores in their mock test.

The type of data collected is both quantitative and qualitative, since the test scores will be conveyed in numbers and the answers of the survey will be examined and interpreted in order to find relationship with tests results. As stated by Labaree (2018), quantitative research focuses on gathering numerical data to then be able to generalize it across groups of people or to explain a particular phenomenon. For example, it will be evidenced whether a topic which participants claim to have or not to have background knowledge on, gained a high or low score. The survey's responses on the other hand, will be examined to find any relevant patterns when correlated to their respective test score, in order to identify any recurrences or relationships between students' perceptions and their performance. This correlation between test scores and survey responses will be considered in order to determine if a participants' perceptions are in accordance to their performance. As Nassaji (2015) claims, qualitative data is used to gain a deep understanding of individuals experiences, behaviors, opinions or perspectives in order to identify themes, patterns or recurrences. This type of research Nassaji considers to be descriptive and conceptual since it concentrates in locating the *what*, rather than the *why* or *how* (pp.129-130).

3.1 Participants

The participants in this study are students of the "Pedagogía en los Idiomas Nacionales y Extranjeros" major of the University of Cuenca, Ecuador. All 28 participants are native Spanish speakers, with an average age of 24. Participants are part of the major's 8th semester students, who are distributed among two groups; the morning group and the afternoon group. At the university of Cuenca, each semester holds from 40-50 students, and every class or group within a semester is formed by 20-25. Every participant in this major is interested in becoming a future English teacher; therefore, is aware of their high probability of coming across a standardized exam that will validate their language proficiency. Due to this, participants showed to be very interested to

be part of this study since results will help them clarify and evidence whether their perception on their own knowledge of a topic and scores will reflect their preparedness for future exams. All the participants took part in the study voluntarily, and were explained that their input would be handled anonymously.

This study was intended to deal with as many students enrolled in the 8th semester of the major in order to have valid data that can somewhat be generalized within this specific context. Among all semesters, 8th semester was chosen since students at this level are likely to have the appropriate level for an IELTS and more importantly there was collaboration from their History of the English Language teacher. The major's 8th semester counts with 46 students who are distributed into two classes; the morning group and the afternoon group. Regardless of the efforts, only 28 from 46 enrolled students decided to voluntarily participate. It is likely that some participants were unwilling to or non-collaborative, since their participation was time-consuming given that they had to complete a 60-minute mock test and afterwards answer a survey. Even so, having 28 students participating in this study has sufficiently launched-out meaningful and valid results that can be used to draw out comprehensible and reliable results.

It is important to mention that these students entered the major without being tested on their English proficiency; nonetheless, they are currently in their 8th semester and are corroborated as having an advanced B1 English level by their History of the English Language teacher, Adriana Mora. The major's curriculum is oriented to impart students with an adequate knowledge of the target language, teaching methodologies and strategies. Students, after completing over 90% of the major's subjects in English during all 9 semesters, are expected to be capable of integrating

new information and communication technologies into their teaching practice, thus meeting the professional demand in the area.

The teacher Adriana Mora has indicated that the participants are all interested in taking either the TOEFL or IETLS exam in a year approximately, when they finish their bachelors' degrees. They are all somewhat familiar with these test structure due to their constant contact with mock tests during their previous semesters.

3.2 Data Collection Instruments

As claimed by Rouse (2016), data collection is an organized method of gathering information from a variety of sources in order to find evidence of an area of interest or responses to a research question. For the purpose of this study a mock test and a survey were used as data collection instruments because they serve well to evidence the relationship between participants' perceptions and performance in a IELTS reading section. Data was collected among participants voluntarily and anonymously through a mock test and survey.

The mock test used in this study is an original IELTS reading section version with three passages and 40 questions. It is a IETLS Practice Test, downloaded from IETLS official website; IELTS.org. Each reading passage has 13 to 14 questions. Throughout the test there are a variety of types of questions which include matching heading questions, true or false, matching paragraph information, summary or sentence completion, multiple choice, list selection, classification questions, table or diagram completion, and short answer questions. The academic passages can be either descriptive, argumentative, and some may contain illustrations (IELTS, n.d). These texts, IELTS mentions, are similar to what might be found in magazines or newspapers.

The survey used in this study is intended to compile participants' perceptions on their knowledge or familiarity with the reading passages' topic. In order to do so, other studies with similar purposes that use surveys as data collection tools have been considered to develop a singular yet similar version. The 14 question survey was divided into two sections. The first section is aimed to ask participants about their familiarity with the topics presented in the passages and overall how comfortable did they feel completing the test. This structure was adapted from Zheng Lin's study in 2002, named "Discovering EFL learners' perception of prior knowledge and its roles in reading comprehension" (Lin, 2002). Lin thought it was accurate and efficient to consider learners' perceptions on how much they know and how much that knowledge influences them in their reading comprehension.

The second section of the survey asks participants about their personal background regarding reading habits and preferences. These aspects and type of questions were adapted from Chelsea Pierleoni's study published in 2012: "Student Perceptions of Their Own Reading Achievement and the Motivational Factors Which Affect this Achievement" (Pierleoni,2012), and Samuel Ameyaw & Sylvester Anto's study conducted in 2018: "Read or Perish: Reading Habits among students and its effect on academic performance: a case study of Eastbank Senior High School-Accra" (Ameyaw & Anto 2018); since they demonstrated that reading habits and preferences among students also relate to their language level and reading comprehension skills.

3.3 Data Collection Procedure

This study requires compiling participants' performance in reading comprehension in order to later relate it to their perceptions on their background knowledge of the topics in the reading passages. As mentioned before, this study uses an IELTS Academic Reading Test downloaded from the official IETLS website (IELTS, n.d), which supplies future test takers with these practice

test in order to prepare and familiarize them with the test structure, content, and timing. Mirroring the format of the original IELTS exam, this mock test contains three reading passages and 40 questions. In order for participants to have access and complete the test, it was transcribed to a Google form while maintaining its core structure and sequence. To maintain the 60-minute time limit to complete the test, the Google form was edited with Form Presenter. This feature permits the creator to assign a time limit to the form. The link of the Google form named "Mock Test IETLS Reading Section" was sent out to participants through mail. Each participant could access the test and complete it just by clicking on the link and then on the button "start".

Following the test, participants were asked to complete a survey. This was a digital survey created in Google forms; therefore, participants could only access it by opening the link that was emailed to them. The survey had no restricted access, however in order to ensure matching participants needed to obligatorily provide the same nickname they had written in the mock test. This survey aimed to compile their perceptions on their familiarity with the reading's topic and their personal background regarding reading habits and preferences. The 14 question survey consists of 12 multiple choice questions, and two short answer questions. It was estimated participants would take three to four minutes to answer the survey sufficiently.

Each participant received an email with the link to the mock test and another link to the survey. Each data collection tool had an individual link since the mock test was timed and the survey was not, so there needed to be control over subjects' participation in the mock test. For the purpose of this study, it was indispensable that the same person who completed the mock test was the same person who completed the examined survey, while their anonymity was preserved at all times. To ensure this, each tool required a space for participants to put a selected nickname. They

were asked to use the same nickname in the mock test and survey. This was the strategy used by the researcher to ensure matching between the mock test and survey while analyzing results.

3.4 Ethical Considerations

While performing a study with human subjects, considering ethical precepts is essential and mandatory (Ketefian, 2015). Ethical precepts aim to assure that, "research is scientifically sound while being respectful toward human beings who participate in such studies, recognizes human dignity and does not jeopardize their health or well-being in any way" (p.165).

For the purpose of this study, as contemplation to ethical considerations, an informed consent was sent out to the participants through email. This process was carried out digitally on the account of the social-contact restrictions and the current pandemic, which the World Health Organization declared due to the coronavirus outbreak on March 11th, 2020. Participants were asked to sign the informed consent either by typing their name in italics or using their electronic signature if they had one. After signing, participants needed to send the informed consent form back, through mail, to the main researcher. This document informed participants about the core purpose of this study and guaranteed all the of full legal age participants' anonymity during the collection of data. Participants were assured that their test results in no way would affect their performance or grades within or outside their major.

Chapter IV: Results and Discussion

Data was collected throughout this study in order to define whether participants' perception on their knowledge or familiarity on a subject correlate with their score on a reading section of an IELTS academic exam. As mentioned before, having familiarity with a topic while reading positively influences performance; however, this study aims to define whether that notion of familiarity is accurate or not.

4.1 Mock Test Results

After careful analysis of collected data, results were divided into objective and subjective outcomes. The objective outcomes refer to the scores or quantitative data, while the subjective outcomes refer to the qualitative data. At the outset, the mock test which contained 40 questions, was graded over 40 points given that each question was worth one point. All 28 participants scored in the range of 15-38 points over 40 points in total; being within the 5 - 8.5 IELTS band score. Ferguson (2014), states that the IELTS exam coveys results through a band score from zero to nine, in order to assess whether the test-taker is ready to study in the medium of English. For the purpose of this study, results were synthesized and conveyed in the following table (Table 2) in order to establish the participants' overall English level of the reading section of an IELTS exam.

As seen in the table, participants managed to reach very good, good, competent, and modest levels of English. Taking into consideration the majority groups, as seen in Table 2, 35.71% of participants managed to demonstrate to be competent users of English, while 21.43% demonstrated to be a good users of the English language.

Table 2: *Students' Scores/Performance in the Mock Test*

Raw Scores	Band Score	Number of Participants	Percentage	English Level According to IELTS
39-40	9	0	0%	
37-38	8.5	2	7.14%	Very good user
35-36	8	0	0%	
33-34	7.5	2	7.14%	Good User
30-32	7	6	21.43%	
27-29	6.5	10	35.71%	Competent User
23-26	6	2	7.14%	
19-22	5.5	3	10.71%	Modest User
15-18	5	3	10.71%	
13-14	4.5	0	0%	
10-12	4	0	0%	
8-9	3.5	0	0%	
6-7	3	0	0%	
4-5	2.5	0	0%	

In order to further categorize whether students' perceptions correlate with their scores, data was systematized to come up with a percentage of accuracy for each reading passage in the mock test. This percentage of accuracy defines the participants' overall correctness in their answers regarding each passage. As seen in Table 3, among all participants, reading passage #1, which had 13 questions had a 77.47% percentage of accuracy. This means that out of all the 364 points there was to gain in the study for passage #1 (13 points/questions per 28 participants), students only managed to reach 282. Following the same trend, reading passage #2 gained a 65.38% of accuracy, and reading passage #3, 62.75%.

Table 3: *Percentage of Accuracy for Each Reading Passage Among all Participants*

Passage	Total Points Scored for Each Question	Total Points for Each Passage	Total Points Scored for Each Passage	Percentage of Accuracy
1	Question 1: 17 Question 2: 17 Question 3: 25 Question 4: 13 Question 5: 18 Question 6: 27 Question 7: 21 Question 8: 27 Question 9: 27 Question 10: 28 Question 11: 27 Question 12: 17 Question 13: 18	364	282	77.47%
2	Question 14: 28 Question 15: 19 Question 16: 16 Question 17: 22 Question 18: 21 Question 19: 16 Question 20: 13 Question 21: 17	364	238	65.38%

	Question 22: 16 Question 23: 18 Question 24: 13 Question 25: 18 Question 26: 21			
3	Question 27: 19 Question 28: 13 Question 29: 24 Question 30: 19 Question 31: 10 Question 32: 11 Question 33: 20 Question 34: 13 Question 35: 20 Question 36: 24 Question 37: 16 Question 38: 21 Question 39 :15 Question 40: 21	392	246	62.75%

4.2 Survey Results

As mentioned before, participants completed a survey after the mock test in order to ascertain their familiarity and knowledge on the topics presented in each reading passage, and to identify their personal background regarding reading habits and preferences. The survey contained 14 questions; one of which was a short answer question. The following diagrams illustrate the participants' answers regarding the familiarity and knowledge they had with the presented topics. For example, figure 1 demonstrates that participants' most common answers relied between "Not at all familiar" with the second reading passage's topic, architecture; and "Not so familiar" with the first reading passage's topic, bottled water.

Figure 1. **Participants familiarity with the topics before reading the passages.**

Before taking the test, how familiar were you with:

- Familiar
- Somewhat familiar
- Not so familiar
- Not at all familiar

Topic	Familiar	Somewhat familiar	Not so familiar	Not at all familiar
MPEMBA EFFECT	21%	43%		36%
ARCHITECTURE		29%	32%	39%
EXTRACTION AND PURIFICATION OF BOTTLED WATER		28%	36%	36%
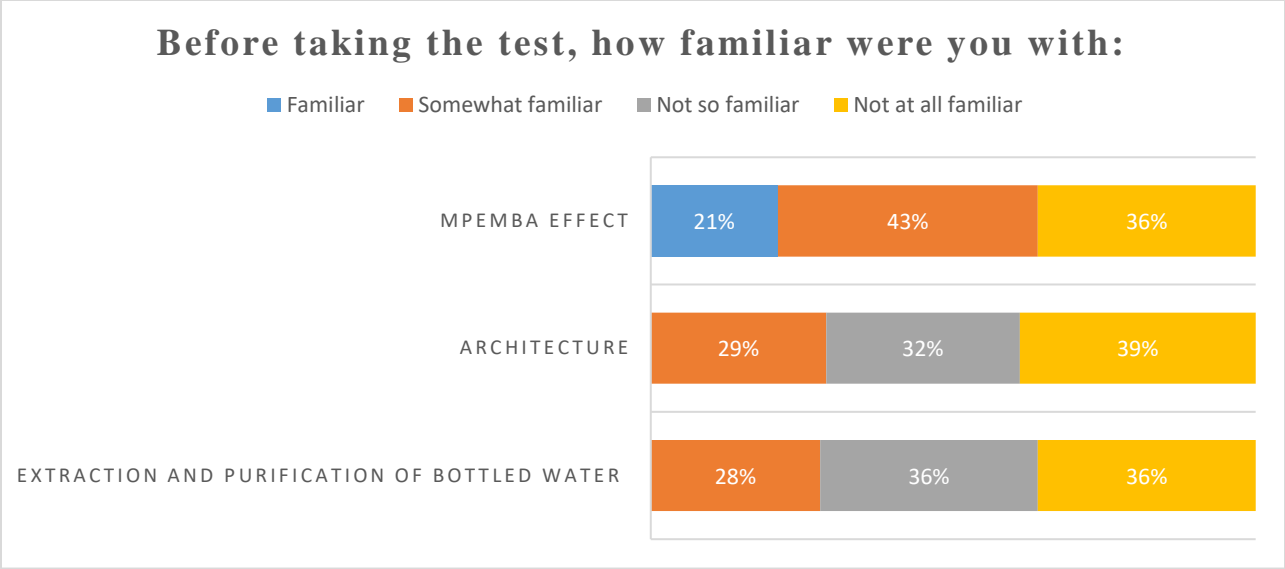
Figure 2. **Participants' knowledge on the topics.**

How much do you know about:

- A little
- Enough
- Nothing

Topic	A little	Enough	Nothing
MPEMBA EFFECT	50%	11%	39%
ARCHITECTURE	57%	18%	25%
EXTRACTION AND PURIFICATION OF BOTTLED WATER	46%	54%	
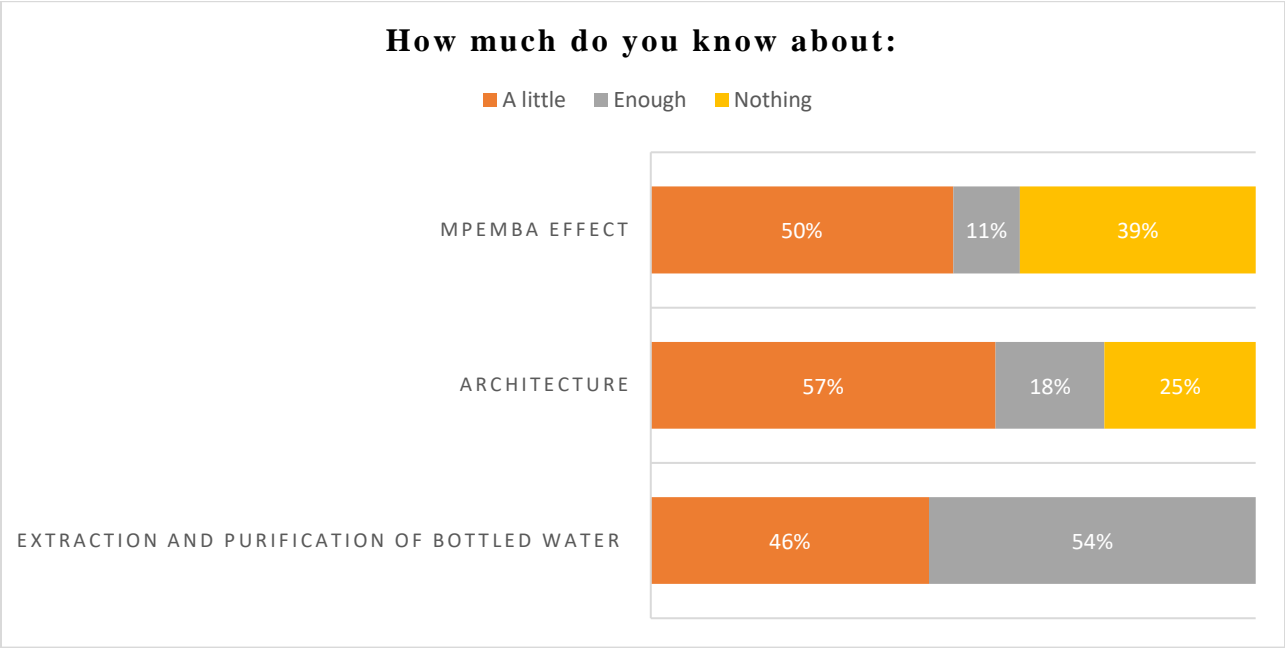
Furthermore, participants were asked to manifest what they thought were the benefits of reading. To avoid, within reason, undeviating data, the study proposed multiple answers for students to choose from. These answers were chosen from Maharsi and Maulani (2019), model on

the most popular benefits of reading according to the perceptions of students who read for pleasure.

These benefits were commonly in reference to enhancing knowledge, vocabulary, grammar skills, or for entertainment (pp.82-85). Even so, participants had the opportunity to write down any other benefit they thought was worth mentioning. Figure 3 shows the results for this question. Most popular choices gravitated around "enhances knowledge", "Increases vocabulary", and "Increases grammar skills".

Figure 3. **Benefits of reading for pleasure**

What benefits do you think reading for pleasure has? Check as many benefits as you like.

Benefit	Count
Enhances knowledge	23
Increases vocabulary	25
Increases grammar skills	20
Entertainment	13
Writing Skills	1
Increases creativity by using mental pictures and imagination	1
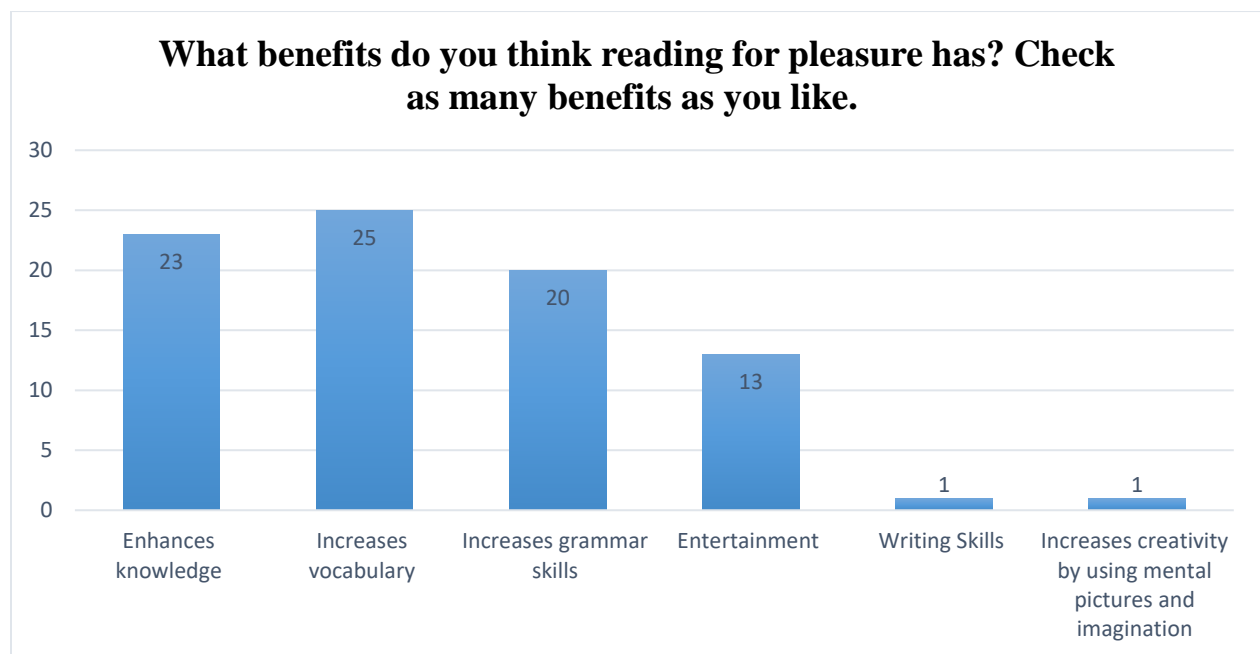
In addition to the questions regarding participants' familiarity with the readings, likings when it comes to selecting reading topics, and benefits they think reading has; they were asked to mention how difficult they thought the test was, if they had time to complete the test, and how many minutes they thought were necessary to complete the test in contrast to the 60 minutes they were given. Aside from this, participants were asked to mention if they like to read and how many

minutes a day they spend on reading. Table 4 reveals the answers by accumulating the number of participants who answered with certain options. For example, when students were asked how difficult they thought the mock test was, it is collaborated that 14 out of the 28 participants said it was "Difficult" while 8 mentioned it was "Appropriate" and 6 stated it was "Very Difficult".

Table 4: *Students' Answers Test's level of difficulty and personal reading habits*

Survey Question	Results Among 28 Participants
Based on your perception, what level of difficulty do you think the test had?	Difficult: 14 Appropriate: 8 Very Difficult: 6
Did you have time to finish the whole test?	Yes: 28
How many minutes do you think was necessary to finish the test?	90 minutes: 17 30 minutes: 6 60 minutes: 5
Personal Background Information	
Do you like to read in your free time?	Yes: 28
How many minutes a day do you spend on reading?	20 minutes: 21 40 minutes: 4 60 minutes: 3

As part of the survey, participants were also asked to mention the topics they prefer reading about. As already mentioned above, in order to avoid, as possible, undeviating data, the study proposed multiple answers for students to choose from, nonetheless, also had a space to provide their own answers. Since the mock test used in this study was a reading section from an IELTS exam, it seemed evenhanded to frame the multiple-choice answers within IELTS' common reading topics. According to IELTSdeal (2017), test-takers are most likely to encounter the following

topics in the reading passages of an IELTS exam: animal science, environmental science, global politics, health and fitness, psychology, tourism, trade and commerce, biology, engineering, inventions and discoveries, information communication technology, and agriculture. Table 5, indicates students' responses regarding their reading topic preferences. For example, 23 out of the 28 participants manifested they prefer reading about health and fitness. The topics "history", "art", and "languages" were the topics written by participants as their own, personal answer.

Table 5: *Students' preferences regarding reading topics*

What topics do you prefer reading about? Check as many as you like, if you do not like any, please write your preferences.	
Reading Topic	**# of students who chose that topic**
Health and Fitness	23
Psychology	19
Tourism	19
Animal Science	15
Inventions and Discoveries	6
Engineering	4
Information Communication Technology	3
Biology	2
History	1
Art	1
Languages	1

Finally, regarding the short-answer question, participants were asked to give more details about their reading habits, preferences, or IELTS preparation process. Only 11 participants out of the 28 answered this question. Table 6 shows the answers to this question exactly as written by the participants, unedited.

Table 6: *Students' personal/individual answers*

Please give more details about your reading habits, preferences, or IELTS preparation process in the space below.
1. *Currently, I am taking 20 minutes at night to read at least 2 pages from a book. Moreover, I am writing my thesis*
2. *I like short passages.*
3. *This test was not that hard, but that's probably becase I believe that I don't have enough vocabulary and reading skills for these kind of tests.*
4. *I currently enjoy reading historical fiction. I think working on reading comprehension exercises is a great way to prepare for one of these tests.*
5. *I usually prefer to read romance/fantasy/sci fi novels, since I found them more entertaining than technical topics.*
6. *I don't like reading.*
7. *I like to read only in spanish.*
8. *I prefer to read in English.*
9. *I read the news everyday and topics about technology.*
10. *Reading english is difficult I prefer to read spanish.*
11. *Reading is entertaining but if you know all the words.*

Chapter V: Conclusions

Throughout the study, results have validated the initial assumption that students' perceptions do not correlate with their performance. Authors such as Persky, Lee, and Schlesselman (2020), have established that learners' perceptions on how much they know rarely mirror their knowledge. Therefore, they sustain that it is unreliable to consider students' perceptions on their learning process, as indicators of an acceptable and sufficient learning development. Commonly, authors such as Zell and Krizan (2014), assure that learners' knowledge perception is often higher than their genuine knowledge. Nonetheless, this study has drawn out fairly opposite results. During this study, students' perceptions regarding their familiarity with the passage's topic tended to be humble. Firstly, reading passage #1, which claimed to be the less familiar to participants, demonstrated to have the highest level of accuracy among responses. Students accurately answered the questions regarding passage #1 even though 72% of the participants claimed the topic of that passage was not so or not at all familiar. Conversely, reading passage #3 which was the only passage 21% of participants claimed to be "familiar" with the topic, reached the lowest level of accuracy among all three passages. It can be concluded that what students believe they know is not actually what they know, since scores demonstrated to be higher than their level of familiarity or knowledge. These results align with Pierleoni (2012), who through his study demonstrated that students' perceptions did not match their level of achievement (pp.30-31). In addition to this statement, results indicated that the majority of participants, valued this mock test as being difficult or very difficult; yet, the majority of scores ranked a 7-7.5 IELTS band score; which according to Ferguson (2014), IELTS appoints as a "Good User" of English. As a reference, an IELTS score of band 8.0 designates a test taker as a very good user in English, whereas a band score of 5.0 denominates the test-taker as a modest user in English (Lai, 2008).

Results also suggest that students' beliefs in the benefits of reading for pleasure do not commonly respond to increased knowledge. According to students' opinions reading does not help much with learning about a topic but rather highly assist you on enhancing vocabulary. Additionally, even though the majority of participants suggest to have 90 minutes rather than 60 to complete the test, the test was 100% completed and scores were satisfactory. Lastly, results indicate that participants are mostly interested in reading about health and fitness, psychology and tourism. Disregarding their preferences, scores were satisfactory which demonstrated that students can reach accuracy when it comes to reading comprehension of topics they are not interested in.

On the other hand, there were results that indicated a clear correlation among students' perceptions and their performance. For example, all the participants indicated that they do like to read in their free time which justifies their overall "Good" performance on the test. Authors such as Braunger and Lewis (2006) state that knowledge and reading comprehension is developed and consolidated through reading practice. The more a person reads the more knowledge and reading comprehension skills he or she gains.

Regarding the short answer question participants were asked to write about their reading habits, preferences, or IELTS preparation process however, responses were very limited and vague. Students' ambiguously expressed overall that they like reading about their topics of interest, prefer reading in Spanish, and feel more comfortable when they are reading something that has familiar words. As declared by Zaller and Feldman (1992), most people who are asked to answer a survey may mirror their confusion on the topic, not be at the level of specificity the survey demands, or be partially consistent on a posture. Zaller and Feldman affirm that open-ended question in its majority echo participants' internal conflicts concerning the question or topic. They

recommend rather scaffolding their assumed connections or postures within their knowledge and the topic in order to lead them to their untangling of ideas and opinions.

The results of this study are intended to aid English teachers, test trainers, and/or foreign English learners when it comes to outlining what abilities or knowledge needs to be reinforced in order to perform sufficiently during standardized exam. As previously mentioned in this study, a standardized exam it what ultimately defines language proficiency; therefore, it is always of much interest to delimit if our students or ourselves are equipped to face the exam and reach sufficient scores. Considering our perceptions as a component that does not 100% mirror our knowledge on a topic, can open gates to exploring other indicators of knowledge and therefore, yield them to become knowledgeable.

References

A Guide to English Proficiency Tests. A Guide to English Proficiency Tests – Academic

Positions. (2020). https://academicpositions.com/career-advice/a-guide-to-english-

proficiency-tests.

Ameyaw, S. K., & Anto, S. K. (2018). Read or perish: reading habit among students and its

effect on academic performance: a case study of Eastbank senior high school-

accra. *Library Philosophy and Practice*.

Anderson, R.C. & Pearson, P.D. (1984). A schema-theoretic view of reading comprehension. In

P.D. Pearson (Ed.), *Handbook of Reading Research* (pp.255-291).

Aydoğan, H., & Akbarov, A. A. (2014). The four basic language skills, whole language

& integrated skill approach in mainstream university classrooms in Turkey.

Mediterranean Journal of Social Sciences, 5(9), 672-680.

Bandura, A. (1986). *Social foundations of thought and action: a social cognitive theory*.

Englewood Cliffs, NJ: Prentice Hall.

Block, C. & Israel, S. (2005). Reading first and beyond: The complete guide for teachers and

literacy coaches. Thousand Oaks, CA: Corwin Press.

Braunger, J., & Lewis, J. P. (2006). *Building a knowledge base in reading*. International Reading

Association.

Brink, P. J., & Wood, M. J. (1998). Exploratory-descriptive designs. In *Advanced design in

nursing research* (pp. 283-286). SAGE Publications, Inc.

Carrell, P.L. (1983), *Three components of background knowledge in reading comprehension1*.

Language Learning, 33: 183-203.

Carrell, P.L. (1989). Metacognitive Awareness and Second Language Reading. The Modern
Language Journal, 73(2), 121-134.

Carrell, P.L. & Eisterhold, J.C. (1983). Schema Theory and ESL Reading Pedagogy. TESOL
Quarterly, 17(4), 553-573.

Cohen, A. D. (2006). The Coming of Age of Research on Test-Taking Strategies. *Language
Assessment Quarterly*, *3*(4), 307–331.

Cunningham, P.,et al., (2004). Reading and writing in elementary classrooms. Boston: Pearson
Education, Inc.

Dimova, S., Hultgren, A. K., & Jensen, C. (2015). *English-medium instruction in European
higher education*. Berlin: Mouton.

Droop, M., & Verhoeven, L. (1998). Background Knowledge, Linguistic Complexity, and
Second Language Reading Comprehension. *Journal of Literacy Research*, *30*(2), 253–
271.

Ensuring quality and fairness. (n.d.). https://www.ielts.org/about-ielts/ensuring-quality-and-
fairness.

Ferguson, E. (2014). *Free IELTS Preparation Website*. IELTS Liz. https://ieltsliz.com/.

Geyte, E. V. (2011). *Reading for IELTS*. London: HarperCollins Publ.

Ginns, P., & Ellis, R. A. (2009). Evaluating the quality of e-learning at the degree level in the
student experience of blended learning. British Journal of Educational Technology, 40
(4), 652–663.

Hsu, Li-W. (2008). Taiwanese Hospitality College Students' English Reading Strategies in

    English for Specific Purpose Courses. Journal of Hospitality and Home Economics, 5(1),

    53-67.

Hughes, J.(2007). At: http://faculty.uoit.ca/hughes/Reading/ReadingProcess.html

IELTS practice test. (n.d.). https://www.ielts.org/usa/ielts-for-test-takers/ielts-practice-test.

IELTSdeal, & IELTSdeal. (2017, December 19). *Topics for IELTS Reading Test*. IELTS Deal.

    https://www.ieltsdeal.com/topics-for-ielts-reading-test/.

Jakeman, V., & McDowell, C. (2008). Reading - Part 2 of 5. In *New insight into IELTS:*

    Student's book with answers (pp. 36-90). Cambridge: Cambridge Univ. Pr.

Ketefian S. (2015). Ethical considerations in research. Focus on vulnerable groups. Invest Educ

    Enferm, 33(1): 164-172

Khanam, S., Zahid, S. H., & Mondol, S. (2014). Role of Schema for Effective EFL

    Reading Comprehension. *ASA University Review*, *8*(1).

Klingner, J. K., Vaughn, S., & Boardman, A. G. (2015). *Teaching reading comprehension to*

    students with learning difficulties, 2/E. Guilford Publications.

Kong, A. (2006). Connections between L1 and L2 Readings: Reading strategies used by for

    Chinese adults readers. The Reading Matrix, 6(2), 19-45.

Kumaravadivelu, B. (2002). *Beyond methods: Macrostrategies for language teaching : macro-*

    strategies for language teaching. ProQuest Ebook Central. https://ebookcentral-proquest-

    com.ezbiblio.usfq.edu.ec

Kyung H. & Darya Z. (2015). Cultural bias in assessment: can creativity assessment help? International Journal of Critical Pedagogy, 6(2),140-148.

Labaree, R. V. (2018). Research Guides: Organizing Your Social Sciences Research Paper: Quantitative Methods [Research Guide].

Lai, K. (2008) 'Providing transparency and credibility: the selection of international students for Australian universities. An examination of the relationship between scores in the International Student Admissions Test (ISAT), final year academic programs and an Australian university's foundation program', *Higher Education Research & Development*, Vol. 27, No. 4, pp.331-344.

Levine, M. G., & Haus, G. J. (1985). The Effect Of Background Knowledge On The Reading Comprehension Of Second Language Learners. *Foreign Language Annals, 18*(5), 391-397.

Lin, Z. (2002). Discovering EFL learners' perception of prior knowledge and its roles in reading comprehension. *Journal of Research in Reading*, 25(2), 172-190.

López-Pérez, M. V., Pérez-López, M. C., & Rodríguez-Ariza, L. (2011). Blended learning in higher education: Students' perceptions and their relation to outcomes. *Computers & Education*, *56*(3), 818–826.

Pautz, Adam. *Perception*. Routledge, 2021. Print.

Persky, A. M., Lee, E., & Schlesselman, L. S. (2020). Perception of Learning Versus Performance as Outcome Measures of Educational Research. *American journal of pharmaceutical education*, *84*(7), ajpe7782. https://doi.org/10.5688/ajpe7782

Philip Roberts Assistant Professor (Curriculum Inquiry / Rural Education). (2019, December 16).

Standardised tests are culturally biased against rural students.

Maharsi, I., & Maulani, S. (2019). High school students' reading habit and perception on reading

for pleasure. International Journal of Indonesian Education and Teaching, 3(21), 80–89.

McNeil, L. (2011). Investigating the contributions of background knowledge and reading

comprehension strategies to L2 reading comprehension: an exploratory study. Reading

and Writing.

Mikulecky, B. S. (2008). Teaching Reading in a Second Language. Pearson Education, Inc.

Murtagh, L. (1989). Reading in a Second or Foreign Language: Models, processes, and pedagogy.

Language, Culture and Curriculum, 2: 91-105.

Nassaji, H. (2002). Schema Theory and Knowledge-Based Processes in Second Language

Reading Comprehension: A Need for Alternative Perspectives. *Language Learning*,

52(2), 439–481.

Nassaji H. Qualitative and descriptive research: Data type versus data analysis. *Language

Teaching Research*. 2015;19(2):129-132.

Oxford, R. (2001). Integrated skills in the ESL/EFL classroom. Retrieved from

https://files.eric.ed.gov/fulltext/ED456670.pdf

Pierleoni, C. (2012). Student Perceptions of Their Own Reading Achievement and the

Motivational Factors Which Affect this Achievement. Education Masters. Paper 216.

Reading Strategies for College Students and Skilled Readers. Universidad Politécnica

Estatal del Carchi, 2014. Print.

Rouse, M. (2016). What is data collection? - Definition from WhatIs.com. Retrieved from

https://searchcio.techtarget.com/definition/data-collection

Shapiro, A. M. (2004). How Including Prior Knowledge As a Subject Variable May Change

      Outcomes of Learning Research. American Educational Research Journal.

Smith, F. (1994) Understanding Reading (5th edition). Hillsdale, NJ: Erlbaum.

Steve. D. (2021). *The Learner's Guide to Language Proficiency Tests.* FluentU.

      https://www.transparent.com/language-resources/tests.html.

TED. (2018, November 17). IS IELTS FAIR. https://ted-ielts.com/is-ielts-fair/

Torres-Olave, B. M. (2012). Imaginative geographies: Identity, difference, and English as the

      language of instruction in a Mexican university program. *Higher Education*, *63*(3), 317–

      335.

Two, C. (2000). ACTIVITY. In Defining Comprehension (pp. 11–17).

Viriya, P. (2013). Students' Perceptions on the Use of Reading Strategies, Reading Difficulties,

      and Factors Affecting Their Reading Performance: A Case Study of a Technical English

      Class. Humanities Journal Vol.20, No.2.

Wallace, C. (2001). Reading. In Carter, R & Nunan, D (Eds).*The Cambridge guide to teaching*

      English to speakers of other languages. Cambridge: Cambridge University Press.21-17

Weir, C., Hawkey, R., Green, A., & Devi, S. (2009). The cognitive processes underlying the

      academic reading construct as measured by IELTS. *IELTS Research Reports*, 9.

Weber, R. (1991). Linguistic diversity and reading in American society. In R. Barr, M.L. Kamil,

      P. Mosenthal, & P.D. Pearson (Eds.), *Handbook of Reading Research* (pp.97-119).

      NY:Longman.

Which test should I take? Which test should I take? | Take IELTS. (2021).

      https://takeielts.britishcouncil.org/take-ielts/which-ielts-test.

Xue, Y. (2019). The Use of Schema Theory in the Teaching of Reading Comprehension. *International Journal of Liberal Arts and Social Science*, 7(4), 58-63.

Zaller, J., & Feldman, S. (1992). A Simple Theory of the Survey Response: Answering Questions versus Revealing Preferences. *American Journal of Political Science, 36*(3), 579-616.

Zell E, Krizan Z. Do people have insight into their abilities? a metasynthesis. *Persp Psychol Sci*. 2014;9(2):111-125.

FIGURE INDEX

APPENDIX A. RESEARCH PROTOCOL APPROVAL

UNIVERSIDAD SAN FRANCISCO DE QUITO USFQ

Oficio N°. CE09-2021-P2021-020TPG
Quito, 30 de marzo de 2021

Señora
Zulema Peña
Investigador Principal
Universidad San Francisco de Quito USFQ
Presente

De nuestra consideración:

El Comité de Ética de Investigación en Seres Humanos de la Universidad San Francisco de Quito "CEISH-USFQ", notifica a usted que analizó la investigación *"Establishing the level of Influence of background knowledge in the International English Language Testing System (IELTS) section scores, of B1 level students at a public University in Ecuador, 2021"* con código 2020-020TPG determinando que es *"exenta"*, de acuerdo con las regulaciones internacionales que rigen las investigaciones en seres humanos.

El CEISH-USFQ otorga este certificado, toda vez que la investigación cumple con uno o más criterios elegibles para una exención:

Investigación con recopilación y/o análisis de datos anonimizados obtenidos de registros existentes.	☐
Investigación con recopilación y/o análisis de datos disponibles públicamente.	☐
Investigación con recolección de datos de manera anonimizada.	☐
Investigación que evalúe anónimamente programas públicos o prácticas educativas.	☑
Investigación que evalúe anónimamente el sabor y/o calidad de alimentos, o estudios de aceptación del consumidor	☐

Datos de la investigación:

Título del estudio	Establishing the level of Influence of background knowledge in the International English Language Testing System (IELTS) section scores, of B1 level students at a public University in Ecuador, 2021.
Código CEISH-USFQ	2021-020TPG
Area de Investigación	Ciencias de la Educación
Duración de la Investigación	Dos (2) meses, veinte (20) días
Investigadores e instituciones participantes	IP: Zulema Peña Alvarez DT: George Daniel Stroe

Universidad San Francisco de Quito USFQ

Documentación de la investigación:

Documentación		Versión	Fecha	# Pág.
1	Protocolo de investigación	VE2.0	01 mar 2021	08
2	Consentimiento informado digital	VE2.0	01 mar 2021	03
3	Instrumentos: 3.1. Encuesta	VI2.0	01 mar 2021	03
	3.2. Ejemplo de prueba académica de lectura	IELTS USA	NA	15
			Total	29

Este certificado tiene una vigencia de dos (2) meses y veinte (20) días, a partir del 30 de marzo de 2021 hasta el 19 de junio del 2021.

La investigación deberá ejecutarse de conformidad a lo descrito en el protocolo de investigación presentado al CEISH-USFQ. Cualquier modificación a la documentación antes descrita, deberá ser presentada a este Comité para su revisión.

El CEISH-USFQ deslinda cualquier responsabilidad en cuanto a la veracidad de la información presentada.

Atentamente,

Iván F. Sisa Caiza, MD, MPH, MS
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cc. Archivos digitales y físicos   - IS/ammt

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APPENDIX B. INVITATION TO PARTICIPATE IN THE STUDY

Investigation TESOL - Mock Test & Survey Link

ZA Zulema Izamar Peña Alvarez <zpena@estud.usfq.edu.ec>
4/6/2021 11:18 AM

Bcc: LAURA MONICA BACILIO MEZA; VERONICA PATRICIA BERMEO MENDEZ; JULISSA MARIBEL IÑIGUEZ AÑAZCO; TAMARA FERNANDA CARDENAS QUEZADA; JUAN JOSE NOVILLO SARMIENTO; K... ⌄

Good morning everyone, as we could see, some of you did not fulfill the following mock test and survey. We have only registered 8 responses. Please if you HAVE NOT participated, I invite you to do so this week. The mock test and survey will be available until April 15th. Your participation is very important.

As you already know, I am conducting a study within my master's program in TESOL, which seeks to establish the level of Influence of background knowledge in the International English Language Testing System (IELTS) reading section scores. In order to do so, I will start by collecting data through a mock test and survey. The mock test will record your performance on a reading section from the IELTS exam, while the survey will collect data regarding your background knowledge on certain topics, your reading habits and preferences. Please complete the mock test first, and the survey afterwards.

The mock test is distributed in a "Google Form" document. This document is timed, so once you hit the button "start" you have 60 minutes to complete the test. You only have one attempt to complete the test. May I recommend you assure your internet connection and time availability.

In order to complete the survey, please enter the respective link. This survey is not timed. You can take as much time as you like, though I am sure it will not take more than 8 minutes to finish.

- Please enter the following link to take the mock test. The two final questions in this mock test which asked for **"Submission ID"** and "Submission **Tracking ID"** are obligated to fill out. You can fill that out with 0000 or any number. It's just a space that has to filled due to technical requirements.

https://presenter.jivrus.com/p/1bUCly6gSYq8VZ1vQX7yBJokEXfZEuugKzs52f8l5LJg

- Please enter the following link to complete the survey.

https://forms.gle/Ezsbn9uZBF2rtLMX6

Best regards,
Zulema.
0998655163

APPENDIX C. INFORMED CONSENT

Este estudio de participación voluntaria, que lo lleva a cabo la Universidad San Francisco de Quito. No lo lleva a cabo ninguna red social. El propósito del estudio es determinar el nivel de influencia del conocimiento previo, en puntuaciones de las secciones de lectura del IELTS, en estudiantes del nivel B1 de la Universidad de Cuenca, semestre 2020-2021.

La encuesta que aplicaremos tiene 14 preguntas sobre los siguientes temas: su percepción acerca del nivel de dificultad del examen, nivel de familiaridad con los temas expuestos en el examen, estudios profesionales de su entorno familiar, preferencias y costumbres generales al leer. Le tomará entre 5 y 8 minutos contestarla.

Los datos recopilados en esta encuesta serán utilizados solo para fines investigativos; por tanto, sus respuestas no serán compartidas sino solo con los investigadores del estudio. Los datos se almacenarán en la nube de la cuenta personal de la investigadora por un año posterior al estudio y luego se borrarán.

No existen riesgos de participar porque:

- Esta encuesta es anónima, no le solicita ningún dato que pudiera identificarlo. Además, a cada encuesta se le asignará un código en lugar del nombre.
- No se utilizarán ni guardarán sus datos de contacto electrónico.
- Para la publicación de los resultados se utilizarán datos grupales, no individuales.

Usted tiene la opción de contestar todas las preguntas o dejar en blanco aquellas que no desea contestar.

Los beneficios que se esperan de los resultados de este estudio son: conocer el conocimiento previo de los temas expuestos de lo-as participantes y determinar qué relación tienen con las puntuaciones. Se espera que las conclusiones de este estudio oriente de mejor manera a los participantes de el examen IELTS, tanto los que entrenan para preparar a estudiantes para el examen y los que van a tomarlo.

Si usted…

1) Tiene dudas o preguntas sobre este estudio o cualquiera de sus procedimientos; y-o
2) Decide que ya no quiere participar y desea que ya no se utilicen los datos que ya se recolectaron de su persona.

Por favor comunicarse con: Zulema Peña Alvarez al 0998655163 o envié un correo al zpena@estud.usfq.edu.ec

Consentimiento: Me han explicado claramente el propósito de la investigación, comprendo los riesgos y beneficios de participar, entiendo que los investigadores adoptarán las medidas necesarias para asegurar la confidencialidad de mis datos personales; me facilitaron un contacto para que responda todas mis preguntas; me dieron tiempo suficiente para tomar una decisión, por lo cual acepto participar voluntariamente en esta encuesta realizada por la Universidad de San Francisco de Quito.

Iniciar encuesta	Salir
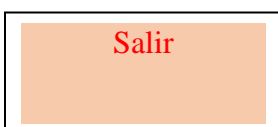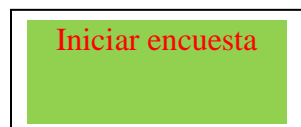
APPENDIX D. SURVEY

Survey: The following survey is meant to collect your perceptions on the reading material you just read. Please answer every question with all honesty. Remember, your participation is totally anonymous. All your answers and performance will only be used for investigation purpose. In advance thank you for your time and collaboration.

1. Based on your perception, what level of difficulty do you think the test had?
   - Very Easy _____
   - Easy _____
   - Appropriate _____
   - Difficult _____
   - Very Difficult _____

2. Did you have time to finish the whole test?
   - Yes _____
   - No _____

3. How many minutes do you think was necessary to finish the test?
   _____ minutes

4. Before taking the test, how familiar were you with passage's 1 topic, "extraction and purification of bottled water"?
   - Very familiar _____
   - Familiar _____
   - Not so familiar _____
   - Somewhat familiar _____
   - Not at all familiar _____

5. Before taking the test, how familiar were you with passage's 2 topic, "architecture"?
   - Very familiar _____
   - Familiar _____
   - Not so familiar _____
   - Somewhat familiar _____
   - Not at all familiar _____

6. Before taking the test, how familiar were you with passage's 3 topic, the mpemba effect?
   - Very familiar _____
   - Familiar _____
   - Not so familiar _____
   - Somewhat familiar _____
   - Not at all familiar _____

7. How much do you know about extraction and purification of bottled water?
   - Nothing _____
   - A little _____
   - Enough _____
   - A lot _____

8. How much do you know about architecture?
    - Nothing _____
    - A little _____
    - Enough _____
    - A lot _____

9. How much do you know about, the mpemba effect?
    - Nothing _____
    - A little _____
    - Enough _____
    - A lot _____

Personal Background:

1. Do you like to read in your free time?
    - Yes _____
    - No _____
    - Partially _____

2. What benefits do you think reading for pleasure has? Check as many benefits as you like.
    - Enhances knowledge _____
    - Increases vocabulary _____
    - Increase grammar skills _____
    - Entertainment _____
    - Other _____

3. What topics do you prefer reading about? Check as many as you like, if you do not like any, please write your preferences.

    Animal Science _____   Environmental Science _____   Global Politics _____
    Health and Fitness _____   Psychology _____   Tourism _____
    Trade and commerce _____   Biology _____   Engineering _____
    Inventions and discoveries _____   Information communication technology _____
    Agriculture _____   Other _____

4. How many minutes a day do you spend on reading?
    - 10 minutes _____
    - 20 minutes _____
    - 30 minutes _____
    - 40 minutes _____
    - 50 minutes _____
    - 60 minutes _____
    - Other _____

5. Please give more details about your reading habits, preferences, or IELTS preparation process in the space below.

_____
_____

IELTS™

Academic Reading
1 Hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.
Write your name and candidate number in the spaces at the top of this page.
Read the instructions for each part of the paper carefully.
Answer all the questions.
Write your answers on the answer sheet. Use a pencil.
You must complete the answer sheet within the time limit.
At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.
Each question carries one mark.

www.ielts.org/usa

READING PASSAGE 1
You should spend about 20 minutes on Questions1–13, which are based on Reading Passage 1 below.

EXTRACTIONANDPURIFICATIONOFDRINKINGWATER

Some consumers choose to purchase bottled drinking water, rather than relying on city tap water supplies. Bottled water has typically been extracted from underground sources. If water exists under-ground, but has no natural exit points, bottling companies may construct a water table well by drilling down to extract water from an unconfined aquifer. This is done when the Earth's natural water level
– known as a water table – is much lower than the Earth's surface. In some cases, as with a valley or gully on a mountain, the level of the water table may be higher than the Earth's surface, and a naturalspring can emerge. Bottling companies are permitted to extract this water from a hole drilled into the underground spring, but the composition of the water must be identical to that of the naturally surfacingvariety nearby.

Artesian water is drawn from a confined aquifer, a deep underground cavity of porous rock that holds water and bears pressure from a confining layer above it. This water can be accessed if companies drilla vertical channel down into the confined aquifer. Due to the pressurised nature of this aquifer, water will often rise up from within it and form a flowing artesian well, which appears as an explosive fountainat the earth's surface. However, this only occurs when the surface is lower than the natural water table.If the surface is not lower than the natural water table, it is still possible to draw artesian water by usingan extraction pump.

Some bottled water is advertised as 'purified', which means it has been subjected to a variety of dif- ferent cleansing processes. A common filtering procedure, known as reverse osmosis, involves the water being pressed through microscopic membranes that prevent larger contaminants from passing through. The microscopic size of these holes is such that they can even obstruct germs, but they are most effective against undesirable materials such as salt, nitrates and lime scale. One disadvantage of reverse osmosis is that a lot of unusable water is generated as a by-product of the procedure; this must be thrown away.

For treating pathogens, an impressive newer option is ultraviolet (UV) light. Powerful UV light has nat-ural antibacterial qualities, so this process simply requires water to be subjected to a sufficient strengthof UV light as it passes through a treatment chamber. The light neutralises many harmful germs by removing their DNA, thereby impeding their ability to replicate. A particularly impressive quality of UV light is its ability to neutralise highly resistant viral agents such as hepatitis.

The overall effects of UV light treatment are variable, however, which leaves many municipal water treatment processes relying on chlorination. Its powerful and comprehensive antimicrobial effect not- withstanding, chlorination is also extremely inexpensive and remains the only antimicrobial treatment capable of ensuring water remains contaminant-free all the way through the pipes and to the taps of domestic homes. Many members of the public remain suspicious of water that has been treated with such a harsh chemical. Its ease of use and affordability has meant that chlorine often plays an import-ant role in making tainted water supplies safe for consumption immediately after natural disasters haveoccurred.

READING PASSAGE 1

You should spend about 20 minutes on Questions1–13, which
are based on Reading Passage 1 below.

Some water also undergoes distillation. This involves water being boiled until it converts to steam, which then passes through a cooling tube and becomes water again. Toxic compounds and impuritiessuch as heavy metal residue are left behind in this process, so the steamed water is typically cleaner than the pre-distilled version. Unfortunately, distillation equipment also removes up to fourteen types ofbeneficial minerals that naturally occur in water. Consequently, those who rely on distilled water may need to take mineral supplements.

In developed countries, all forms of drinking water are typically subject to stringent quality control pro-cesses, so there is little evidence to suggest importing bottled water at significant expense will be saferor healthier than regular tap water from a municipal drinking supply. Both tap water and bottled water are tested for pathogens and contaminants and, aside from isolated cases related to issues such as faulty plumbing or old pipes, tap water is harmless. Nevertheless, many purchasers of bottled water stilljustify their choice on the quite reasonable basis that tap water has a distinctly unpleasant aftertaste related to the chlorination process it has undergone.
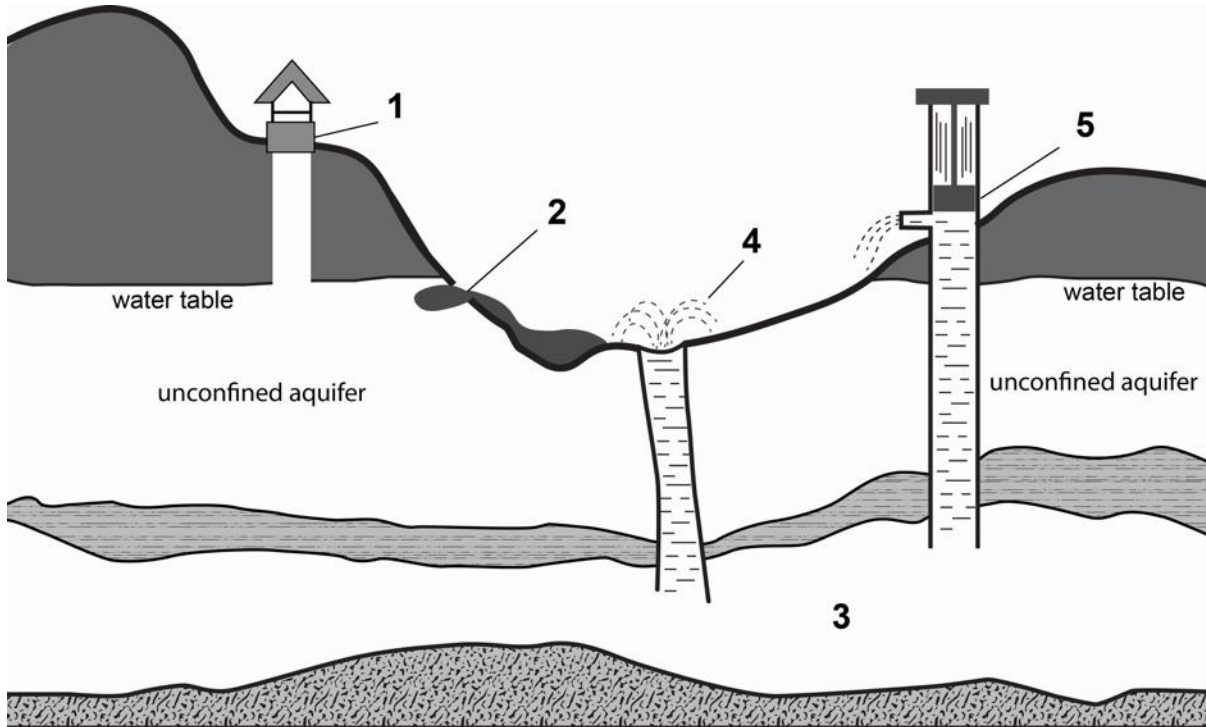
Questions 1–5

Label the diagram below.
Choose NO MORE THAN THREE WORDS from the passage for each answer.
Write your answers in boxes 1–5 on your answer sheet.

1(provides access to trapped water)

2(due to the lower land level)

3 ………………..

4 flowing artesian well (looks like…………………………)

5is necessary to access this water source

Questions 6–11

Classify the following statements as referring to A

reverse osmosis

B   UV light treatment

C   chlorination

D   distillation

Write the correct letter, A, B, C or D, in boxes 6–11 on your answer sheet. NB
You may use any letter more than once.

6   It continues to protect water as it is being transported.

7   It is particularly useful during emergencies.

8   It uses a physical barrier to separate unwanted matter from water.

9   It prevents bacteria from reproducing.

10   It removes all mineral particles.

11   It produces a lot of waste water.

Questions 12 and 13

Choose TWO letters, A–E.
Write the correct letters in boxes 12 and 13 on your answer sheet.
Which TWO of the following claims about water are made by the writer?

A   Bottled water is overpriced.

B   Tap water may not have a nice flavour. C

Most people should drink bottled water. D   Tap

water is usually safe to drink.

E   Public water supplies need better maintenance.

READING PASSAGE 2
You should spend about 20 minutes on Questions 14–26, which are based on Reading Passage 2 below.

THE INTERNATIONAL STYLE

A   In the early decades of the 20th century, many Western cities experienced a steep rise in demand for commercial and civic premises, due to population growth and expansion of the white-collar professions. At the same time, architects were growing discontented with the ornamental spirals and decorative features in the prevailing design ethos of art deco or art moderne. Once considered the height of sophistication, these styles were quickly becoming seen as pretentious and old-fashioned. In this confluence of movements, a new style of architecture emerged. It was simple, practical and strong; a new look for the modern city and the modern man. It was named 'the international style'.

B   Although the international style first emerged in Western Europe in the 1920s, it found its fullest expression in American architecture and was given its name in a 1932 book of the same title. The first hints of it in America can be seen on the Empire State Building in New York City, which was completed in 1931. The top of the building, with its tapered crown, is decidedly art deco, yet the uniform shaft of the lower two thirds represents a pronounced step in a new direction. Later efforts, such as the United Nations Secretariat building (1952) and the Seagram Building (1954) came to exemplify the 'true' international style.

C   The architects of the international style broke with the past by rejecting virtually all non-essential ornamentation. They created blockish, flat-roofed skyscrapers using steel, stone and glass. A typical building facade in this style has an instantly recognisable ribbon design, characterised by strips of floor-to-ceiling windows separated by strips of metal panelling. Interiors showcased open spaces and fluid movements between separate areas of the building.

D   Fans of the international style of modern buildings celebrated their sleek and economical contribution to modern cityscapes. While pre-modern architecture was typically designed to display the wealth and prestige of its landlords or occupants, the international style in some ways exhibited a more egalitarian tendency. As every building and every floor looked much the same, there was little attempt to use these designs to make a statement. This focus on function and practicality reflected a desire in mid-century Western cities to 'get on with business' and 'give everyone a chance', rather than lauding the dominant and influential institutions of the day through features such as Romanesque columns.

E   Detractors, however, condemned these buildings for showing little in the way of human spirit or creativity. For them, the international style represented not an ethos of equality and progress, but an obsession with profit and 'the bottom line' that removed spiritual and creative elements from public life and public buildings. Under the dominance of the international style, cities became places to work and do business, but not to express one's desires or show individuality. It is perhaps telling that while banks and government departments favoured the international style, arts organisations rarely opted for its austerity.

READING PASSAGE 2

F   By the mid-1970s, the international style was ubiquitous across key urban centres, dominating skylines to such an extent that many travellers complained they could get off a plane and not know where they were. By their nature, buildings in this style demanded very little of architects in the way of imagination, and a younger generation of designers was yearning to express their ideas and experiment in novel and unexpected ways. The outcome was a shift toward postmodernism, which celebrated much of what the international style had dismissed: decoration, style without function, and an overall sense of levity. By the turn of the 1980s, the international style was considered outdated and was falling rapidly out of favour.

Questions 14–19

Reading Passage 1 has six paragraphs, A–F.
Which paragraph contains the following information?
Write the correct letter, A–F, in boxes 14–19 on your answer sheet.

14   a description of how international style buildings look on the inside

15   a reference to institutions that didn't like to use international style buildings

16   a reason why architects didn't like the international style

17   a building which combined art deco and international features

18   types of materials commonly used in international style buildings

19   an architectural feature previously associated with prominent organisations

Questions 20–24

Complete the sentences below.
Choose NO MORE THAN THREE WORDS from the passage for each answer.
Write your answers in boxes 20–24 on your answer sheet.

20   The development of the international style was prompted by an increased need for
……………….. buildings

21   Designers used hardly any …………………….. on international style buildings.

22   International style buildings are easily identified from the outside because of the
……………….. .

23   Demonstration of ………………. and ………………. was often an important factor in   the
design of old-style buildings.

24   The similarity of international style constructions reflected the concern of architects   with
……………….. and

 ……………….. .

Questions 25–26

Choose the correct letter, A, B, C, or D.
Write the correct letter in boxes 12–13 on your answer sheet.

25   Some people did not like the international style because they felt it focused too much onA

        the public sector

B   differences between people

C   new ideas

D   making money.

26   In the mid-1970s

A   the best architects were no longer using the international style.

B   there was a lot of international style architecture in major cities.

C   young architects were becoming interested in the international style.

D   people visited cities specifically to see international style buildings.

READING PASSAGE 3
You should spend about 20 minutes on Questions 27–40, which are based on Reading Passage 3 below.

THE MPEMBA EFFECT

In 300 BC, the famous philosopher Aristotle wrote about a strange phenomenon that he had observed: "Many people, when they want to cool water quickly, begin by putting it in the sun." Otherphilosophers over the ages noted the same result, but were unable to explain it. In 1963, a young Tanzanian student named Erasto Mpemba noticed that the ice cream he was making froze faster
if the mix was placed in the freezer while warm than if it were at room temperature. He persisted in questioning why this occurred, and eventually physicist Denis Osborne began a serious investigation into what is now known as the Mpemba Effect. He and Mpemba co-authored a paper in New Scientistin 1969, which produced scientific descriptions of some of the many factors at work in freezing water.

It was initially hypothesised that the warm bowl melted itself a place in the ice on the freezer shelf, thus embedding its base in a 'nest' of ice, which would accelerate freezing. The hypothesis was tested by comparing the result when bowls of warm water were placed on ice and on a dry wire shelf;this demonstrated that the ice nest actually had little effect. A second suggestion was that the warmerwater would be evaporating at its surface, thus reducing the volume needing to be frozen, but this idea was also shown to be insignificant. Thermometers placed in the water showed that the cooler water dropped to freezing temperature well before the warmer bowlful, and yet the latter always frozesolid first. Experiments at different temperatures showed that water at 50C took longest to freeze in aconventional freezer, while water initially at 350C was quickest.

On further examination, an explanation for this paradox began to emerge. Losing heat from the water occurs at the points where it is in touch with the colder atmosphere of the freezer, namely the sides ofthe bowl and the water surface. A warm surface will lose heat faster than a cold one because of the contrast between the temperatures; but of course there is more heat to be lost from one bowl than theother! If the surface can be kept at a higher temperature, the higher rate of heat loss will continue. As long as the water remains liquid, the cooling portion on top will sink to the bottom of the bowl as the warmer water below rises to take its place. The early freezing that may occur on the sides and base of the container will amplify the effect.

The bowl that is more uniformly cold will have far less temperature difference so the water flow will be minimal. Another inhibiting factor for this container is that ice will also form quite quickly onthe surface. This not only acts as insulation, but will virtually stop the helpful effects of the water circulating inside the bowl. Ultimately, the rate of cooling the core of this body of water becomes so slow that the other warmer one is always fully frozen first. While there are limitations to this
comparison (for example, we would not see such a result if one quantity were at 10C and another at990C) this counter-intuitive result does hold true within the 5–350C range of temperatures indicatedpreviously.

READING PASSAGE 3

You should spend about 20 minutes on Questions 27–40, which are based on Reading Passage 3 below.

Since this paper was published, the validity of the research findings has been questioned by a number of reviewers. They point out that the initial experimental question was not clearly defined; forexample, the researchers needed to decide on exactly what constituted freezing the water. They alsostate that the rate at which water freezes depends on a large number of variables.

Container size is one of these; for the Mpemba Effect to be noticed, the container must be large enough to allow a free circulation of water to take place, yet small enough for the freezing areas of the side and base to be effective at extracting heat too. Secondly, research at a University in St Louis, Missouri, suggests that the Mpemba Effect may be affected by water purity, or by dissolved gas inthe water. Distilled water is totally free of the particles that are common in normal drinking water or mineral water. When suspended in water, these particles may have a small effect on the speedof cooling, especially as ice molecules tend to expel them into the surrounding water, where they become more concentrated. Just as salt dissolved in water will raise the boiling point and lower the temperature at which it freezes, the researchers found that the final portion of ordinary water neededextra cooling, below zero, before all was frozen solid.

One more factor that can distort the effect is observed if the bowls are not placed simultaneously into the same freezer. In this case, the freezer thermostat is more likely to register the presence of a hotterbowl than a colder one, and therefore the change in internal temperature causes a boost of freezing power as the motor is activated.

The Mpemba Effect is still not fully understood, and researchers continue to delve into its underlying physics. Physicists cannot reach consensus. Some suggest that supercooling[1] is involved; others that the molecular bonds in the water molecules affect the rate of cooling and freezing of water. A 2013 competition to explain the phenomenon run by the Royal Society of Chemistry attracted more than 22,000 entries, with the winning one suggesting supercooling as an important factor so it seemsthe question and its underlying explanation continue to fascinate.

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1   cooling a liquid below its freezing point without solidification or crystallisation

Questions 27–33

Complete the summary using the list of words, A–O, below.

Write the correct letter, A–O, in boxes 29–34 on your answer sheet.

For more than 2000 years people have wondered why raising the 27 ....of cold water before cooling it results

in more rapid cooling. At first researchers thought that a warm container created its own icy 28 ………………... which

made the water freeze faster, but comparisons with containers resting on a dry 29 ………………... indicated that this

was inaccurate. Evaporation of water proved not to be a 30..Temperature measure-ments showed that,

although the water in the cooler container reached 00C before the warmer one, it took longer to actu-ally solidify. The water

temperature drops the most at the top and sides of the container. Provided there is a temperature31…   , the

water will continue to circulate and to cool down. Cooler water will have less water 32… .... , and thus a slower

rate of freezing. If ice forms on the top of the water, this will further slow the 33…................................. of freezing, but if it forms

on the bottom and the sides of the container, this will increase the rate of cooling.

A	melt	B	element	C	process
D	centre	E	acceleration	F	surface
G	factor	H	hollow	I	matter
J	circulation	K	limit	L	significance
M	theory	N	difference	O	result
P	temperature				

Questions 34–39

Do the following statements agree with the information given in Reading Passage 3?
In boxes 35–40 on your answer sheet, write

TRUE	if the statement agrees with the information
FALSE	if the statement contradicts the information
NOT GIVEN	if there is no information on this

34   The Mpemba Effect cannot be seen when comparing liquids with an extreme temperature dif-ference
.

35   Osborne and Mpemba's results are still widely accepted today.

36   The size of the container does not alter the Mpemba Effect.

37   Osborne and Mpemba experimented on both pure and impure water.

38   One variable is the timing of containers in a freezer.

39   Physicists now agree that supercooling accounts for the Mpemba Effect.

Question 40
Choose the correct letter, A, B, C or D.
Write the correct letter in box 40 on your answer sheet.

The Mpemba Effect is best summed up as the observation thatA   ice

cream freezes at different temperatures.

B   different sources of heat result in water cooling at different rates.

C   salt water freezes at a lower temperature than ordinary water.D

        warmer water can freeze faster than colder water.

Academic Reading Answer Key

Reading Passage 1, Questions 1–13

1	water table well
2	natural spring
3	confined aquifer
4	(an) explosive fountain
5	(an) extraction pump
6	C
7	C
8	A
9	B
10	D
11	A
12	B in either order
13	D in either order

Reading Passage 2, Questions 14–26

14	C
15	E
16	F
17	B
18	C
19	D
20	commercial and civic
21	(non-essential) ornamentation
22	(recognisable) ribbon design
23	wealth (and) prestige/prestige (and) wealth
24	function (and) practicality
25	D
26	B

Reading Passage 3, Questions 27–40

27	P
28	H
29	F
30	G
31	N
32	J
33	C
34	TRUE
35	FALSE
36	FALSE
37	NOT GIVEN
38	TRUE

Academic Reading Answer Key

39   FALSE
40   D