A Pilot Study on Reading Difficulties Encountered by University Students in Pakistan

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Abstract
The pilot study has a significant role in the success of the research. It is frequently recommended to concentrate on numerous issues and problems. For instance, the validity and reliability of the instrument and tools to be applied in the study can be verified via a pilot study hence, this article explores the reliability of the instrument; the questionnaire samples were selected through simple random sampling from the combined class of undergraduate ESL learners. The study used a questionnaire that contained 25 items based on a five-point Likert scale to accumulate responses on the five key variables: reading strategies, language knowledge, background knowledge, reading motivation, and reading process. Cronbach alpha test was run on all the items to know the reliability of each item. The average result of the test was .817 indicated that the participants faced no hurdles while answering the questionnaire, therefore, the questionnaire needs no further modification and thus, it can be used to collect data for the main study.

Keywords: Pilot study, ESL, Undergraduate, Cronbach alpha, Likert scale

1. Introduction
The word pilot study denotes a brief description of a full-length study which is also known as a possibility or feasibility of studies. "Conducting pilot study is always having significant importance to develop its reliability and validity when it is applying to the new context"(Cohen, Manion, & Morrison, 2007). It is an unambiguous pre-testing of specific research tools and instruments, for instance, questionnaires, observations and interviews too. The term pilot study is applied in two diverse approaches in social science researches; it can be referred to as a feasible study or a trial run used for the preparation of a larger or main research. Apart from that, a pilot study could also be a pre-testing or trying out of a particular research instrument.

A pilot study in Applied Linguistics in general refers to a "dress rehearsal" for the collection of data on larger scale (Dornyei, 2007) and thus, has significant importance for a good research design. In addition, reliability and validity of research tools play a prominent part in any scientific study and frequently these could be understood by examining the findings of a pilot study of the intended instrument. If the above-stated elements are not valid and reliable then the study carries no worth to be applied. Although conducting pilot studies does not guarantee the accomplishment of the tasks, yet the studies increase the possibility of achievements in a particular area of research. However, the entire outcomes of pilot studies are rarely reported in the research literatures (Van Teijlingen, 2001). More often studies just refer to a particular factor of pilot study; testing of a research instrument and subsequently affirm the questionnaire was run and tested to check its reliability and validity. Thus, the fundamental aim of conducting this pilot study is to ensure that the tools developed are valid and reliable.

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study was basically to test the feasibility of the research instrument intended for a main study; the questionnaire.

2. **Methodology**

The instrument which is being used in this research has been piloted with twenty five (25) ESL learners BS English 3rd and fourth year all the students have been selected through sample random sampling. After selecting the participants by following the procedure of sample random sampling the learners have been given the questionnaire. In addition to this they have also been asked to report and highlight if they found any difficulty throughout the reading questionnaire in terms of words and their meaning.

2.1. **Design**

In research, Research design plays the core role because it gives the researcher a roadmap to design overall ground for collecting the data from the participants selecting the research instruments to analyse the collected data by keeping research purposes, procedures, and limitations of research study in hand. "Hence, the overall structure of research tools and instruments including qualitative, quantitative, case studies, ethnographic research cover and indicates the research design in any research study". Moreover, researchers relate the research design in order to get the right tools of selection and use them while conducting research study. "The mixed methods research design will be applied to get the findings besides drawing the conclusions. The aim of mixed methods is to gather and examine to amalgamate the two approaches of research: qualitative and quantitative in a specific scientific study in other words a procedure of studies to find a particular research problem (Creswell & Plano Clark, 2011).

2.2. **Instrument:**

In present research study, researchers chose Twenty-five (25) samples by using the random sampling technique from ESL undergraduate learners. Though, the researcher got consent and took permission from subject teacher of the learners. Moreover, those twenty-five (25) learners were taken outside the lecture hall and were given the contusive environment in the separated lecture hall so that learners could take part in the study and read consent form and sign it and then go for filling questionnaires freely and on their own wish. By following all the research protocols, researcher gave an introduction of present study along with explaining the chosen samples the purpose of research study and then the questionnaire was distributed among the participants and timer was kept for counting the timings which were already mentioned in the questionnaire. The participants were given total time from 13 to 14 minutes and each participant took expected to read complete questionnaire. However, chosen participants read and understood each item of questionnaire easily and showed no any kind of ambiguity throughout the filling process. In this segment of the pilot study, the questionnaire contains twenty-five (25) items based on a five-point Likert scale the questions were distributed to twenty-five undergraduate participants. The questionnaire planned to accumulate responses on the five (5) key variables: Reading strategies, language knowledge, background knowledge, reading motivation, reading process. To evaluate the internal reliability of the questionnaire Cronbach’s alpha test was run on all the items the outcomes
of the test are projected in the below table:

In present study, researcher set the questionnaire on five key variables related to reading such as reading process, background knowledge, reading strategies, language knowledge, and reading motivation. Researcher for present study adapted the questionnaire from the research study of Sajeerat Wutthising Chai (2011) who conducted research at Thai Christian School Bangkok, Thailand. Since, researcher made some changes in each items of questionnaire of especially in the items such as, 1, 3, 5, 10, 11, 15, 24, 25) following is present the example:

Item one: I don’t have knowledge and appropriate use of English vocabulary therefore whatever I am reading is out of my understanding (modified)
Item one: I don’t know the vocabulary and idiomatic usage so I cannot understand what I am reading (original).

In present study, researcher used very simple language while paraphrasing the questionnaires because of participants language background into considerations.

2.3. Participants
The tool which is being used in this research has been piloted with twenty five (25) ESL learners BS English 3rd and fourth year participants; all the students have been selected through sample random sampling. After selecting the participants by following the procedure of sample random sampling the learners have been given the questionnaire. In addition to this they have also been asked to report and highlight if they found any difficulty throughout the reading questionnaire in terms of words and their meaning.

2.4. Data collection
Researcher used random sampling technique in present study. Although, standard method was put into consideration while selecting and using random sampling process which followed and set six steps such as, Defining the population; choosing the sample size; Listing the population; Assigning numbers to the units; Finding random numbers, selecting sample. Moreover, in order to gather the data in this study, the quantitative data has been collected through researcher developed Likert type close ended questionnaire for investigating the reading comprehension difficulties faced by L2 tertiary learners.

2.5. Data analysis
Data analysis is the process in which researcher analysed the collected data by utilizing various types softwares and tools, and in present study, researcher used SPSS software version 26 in order in order to accumulate, analyse and organize the quantitative data which were collected from respondents regarding difficulties in reading comprehension. By using SPSS software 26 version, frequency distribution and percentage of all the variables were seen. Hence, the demographic data of the participants, frequency analysis was done to check participants responses.
3. Findings

![Figure 1: Graphic Illustration of Departments](image1)

The above diagram illustrates the number of departments take part in the piloting study. As the blue colour in the diagram represents students of English department; therefore the majority of the participants belong to English department. Moreover, the second major proportion covered by the students of business administration since the green represents the participants who associated with above mentioned school. As the skin colour in the above diagram represents the participants who study information technology; therefore; the least number of participants belong to the department of information technology.

![Figure 2: Visual Illustration of gender](image2)

The above diagram classifies the number of female and female students as the illustration of the above diagram vividly demonstrates that females participants slightly greater that of boys participants.
This above diagram demonstrates the origin and background of the respondents. The green colour shows the presence of participants who belong to urban areas while the blue colour demonstrates those whose background is rural area; therefore, majority of participants belong to urban areas. Apart from that when the participants finished with the reading it has been reported that the language is easy to understand as the translation of the questionnaire is given next to each items in into the national language. It has made easier to read and understand the questionnaire.

**Table 1: Questionnaire with variables and number of items on each scale**

(a) Problem related to language knowledge  
*Number of items 1 to 5 item*

(b) Problem related to lack of reading strategies  
*Number of items 6 to 10*

(c) Problem related to reading Motivation  
*Number of item 11 to 15 items*

(d) Problem related to reading process  
*Number of items 21 to 25*

(e) Problem related to limited background Knowledge  
*Number of items 16 to 20*

4. **Validity and Reliability**  
Since, reliability and validity of instruments are indispensable in research study, researcher gave more and viable focus on this section and have discussed this process in detail. However, researcher did pilot survey which was early experiment before it went for whole study process and aim behind that pilot survey was to check reliability and validity of the instrument. For present research study, researcher used and applied Cronbach Alpha test on all items of the questionnaire and level of Cronbach Alpha was adopted from (Gliem & Gliem, 2003).

**Table 2: Level of reliability**

<table>
<thead>
<tr>
<th>Alpha-Cronbach Score</th>
<th>Level of Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 &gt; 0.9</td>
<td>Excellent</td>
</tr>
<tr>
<td>0.89 &gt; 0.8</td>
<td>Good</td>
</tr>
<tr>
<td>0.79 &gt; 0.7</td>
<td>Accepted</td>
</tr>
<tr>
<td>0.69 &gt; 0.6</td>
<td>Questioned</td>
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</table>
The reliability coefficient of current study instrument remained as 0.920, which is very encouraging and a quite high rate of reliability to make sound judgment (GilemandGilem, 2003). As displayed in table 3.

Table 3: Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.817</td>
<td>.802</td>
<td>25</td>
</tr>
</tbody>
</table>

Since, it was the main aim behind this study was to test and examine reliability of research instrument therefore, researcher used and implied Cronbach Alpha test to check reliability of all items respectively. Additionally, table 3 (three) shows that reliability of the questionnaire is illustrates the statistic reliability of the questionnaire is point eight seventeen (.817) which is vastly considerable. Hence, results of reliability statistics is acceptable of all the items to go for collecting the data in next step. Furthermore, researcher did pilot study all the items and reliability statistics of that pilot study showed and demonstrated was point eight seventeen (.817). however, in research specifically, reliability reflects the procedure of analysing data, use strategies, taking measurements and results obtained by that in research (Dornyei, 2003).

5. Conclusion

The main purpose of this small-scale study was to evaluate learners' responses to questionnaires and the questionnaire comprises five variables which are classified: to know and understand the reading difficulties including language knowledge issues; problems in reading strategies; lack of reading motivation; problems of background knowledge; problems while reading process. Each variable carries five items. The question with some modification and with the translation in the native language of the participants was illustrated to be reliable, applicable, and valid. As the participants reported that they faced no hurdles while they were going through the questionnaire, it is suggested that the questionnaire needs no further modification and alteration. Moreover, it is also proposed to collect further data on the quantitative part for the main study besides addressing the variables along with all the items.