CHAPTER THREE
RESEARCH METHODOLOGY

3.0 Introduction

This chapter will explain the methodology of the study. In that, it will describe the methods and techniques adopted, the instruments used, the population, the samples and the procedures of data analysis.

3.1 The methodology

This study is descriptive in nature. It will focus on the ‘what’ of the problem in question. The study will attempt to investigate the different aspects of the problem and it will shed light on the areas that need attention. The sections below give an account of the various components of the methodology.

3.2 Population and Sampling

The geographical setting of this study is Umbada Locality. The population of the study is all of the English language teachers in the Sudan as well as the secondary school students. There are (132) English language teachers at secondary schools in Umbada Locality. A sample of 100 teachers was randomly selected for the questionnaire. The number of students in the schools in the locality amounts to (4425) the sample drawn from this number was 200 students. They did the language test. The schools which were included in the test involved both the state-run schools and the private schools. Some of the government schools were classified as ‘model schools’, others are ordinary ones.

3.3 The Tools and Instruments

Two instruments were used in the study for the purpose of data collection.
3.3.1 The questionnaire

The questionnaire has two sections to it. The respondents were presented with items to which they were requested to choose one of three options: Agree. Neutral or Disagree.

(i) Section one

This section focused on the problems that face the teachers of English in teaching grammar. This section of the questionnaire is made up of eight items. All of them deal with the problems that face the teachers of English in teaching grammar. The items try to elicit information about:

A. The effect of bad teaching on achieving the objectives of teaching grammar.
B. The effect of high teaching load on teaching grammar.
C. Effect of ungrammatical free writing on learning grammar.
D. Effect of short grammatical sentences used by teachers on students’ practice of grammar.
E. Effect of teacher-centeredness on learning of grammar.
F. Effect of using unfamiliar words on the learning of students.
G. Effect of lack of grammar practice.
H. Effect of lack of teachers’ motivation on teaching grammar.

A (ii) Section two

This section focused on the problems that relate to methods and techniques of teaching grammar. It had seven items in it. The items deal with the following:

A. Effect of using the Grammar Translation Method on learning grammar.
B. Effect of using Oral Situational Approach on the students’ output.
C. Effect of lack of using pair work and group work on teaching grammar.
D. Effect of neglecting visual aids on illustrating certain grammatical structures.

E. Effect of lack of conversation practice on the communicative competence of the students.

F. Effect of teaching grammar out of context on the students’ grammar.

G. Effect of the misuse of information gap technique on learning grammar by the students.

The questionnaire was developed through the following stages:

1. It was designed by the researcher in consultation with some colleagues.
2. It was then presented to the supervisor for approval.
3. Then it was referred to two experts for judgment.
4. After that it was piloted in a small scale group of teachers.

The reliability of the questionnaire was calculated by SPSS. The Cronbach’s alpha was as follows:

<table>
<thead>
<tr>
<th>Table (3.1): Reliability Statistics: the questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha Based on Standardized Items</td>
</tr>
</tbody>
</table>

This table shows a very high figure of reliability (0.975).
**The test**

The test was designed in order to spot out the areas of problems in the students’ performance.

The test had five questions. Each one focused on one aspect. These are:

A. Put the verbs between the brackets into their correct forms.
B. Complete sentence B so that it has similar meaning to sentence A using the word given.
C. Fill in the spaces with suitable preposition from the list below.
D. Add the following affixation to the verb at the end of each sentence to form words which fit in the spaces below.
E. Write a paragraph describing your town.

The test went through the same procedures as the questionnaire in order to ensure its validity and reliability. A test of split-half was carried out and the result was as follows:

<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>.743</td>
<td>.761</td>
<td>4</td>
</tr>
</tbody>
</table>

Cronbach’s Alpha is 0.761, which indicates very high reliability of the test.
3.4 Procedures for data analysis

The data collected thorough the questionnaire will be tabulated and treated statistically by the SPSS programmed. The results in percentile from will be used to answer the relevant study questions. Also, the data collected from the test items will be discussed in order to highlight the areas of problems in the students’ performance. This data will also be treated using SPSS. The results will also be used to answer the corresponding research questions and to verify the hypotheses.

3.5 Validity and Reliability:
3.5.1 Content Validity

Validity is extent to which a test measures what it claims to measure. It is vital for a test to be valid in order for the results to be accurately applied and interpreted.

Four professionals were requested to comment on the questionnaire and test in terms of clarity and validity of the items and their relevance. In the light of the ELT experts’ judgments about the relevance of the items to the purpose for which they were defined, the number of items was 15. Some of statements were dropped, whereas complicated or ambiguous ones were reworded and simplified in order to make them concise and precise.

On the other hand, in section three some statement asked for other comments and suggestions, was deleted. Moreover, the length of the questionnaires and the time needed for administration were taken into consideration. Experts' opinions contributed to the modification of the tools in both content and design. For instance, Preliminary data are used to find the homogeneity of the sample, homogeneous in primary sample of teachers in terms of age, gender, experience and qualifications were pointed out. Therefore, they were deleted and also the primary sample in the students' test.
3.5.2 Reliability

Carmenz and Zeller (1991) Persistence precision scale as the tool's ability to give the same results if the measurement repeat the same person several times in the same circumstances, reliability is known as the stability or consistency of the assessment. Reliability and validity in most cases is the correlation coefficient, and are intended to repeated readings over the measurement results link. In many of the research is use a tool to measure for the first time, be tested on certain people and then re-tested the same people again, and then calculates the correlation between the measurement results at the initial time with those of the next time coefficient. It is obvious that if the high credible tool, the results of these times will be the same or applicable to the first measurement results. In addition, the validity depends on the internal consistency, which means that the questions, all in the public purpose to be measured. There are numbers of statistical methods for measuring the validity and the most common and in which we can measure the consistency is a way (Alpha Crunbach), which depends on the internal consistency and give an idea of the consistency of the questions with each other and with all questions in general. There is also test method segmentation into two halves. (Split half method) is the way Krnbach is most commonly used when compared to retail in half because the way Krnbach rely on retail more than one part and repeatedly measuring between those parts instead of the correlation measure between the two halves only. Overall, the judgment on the validity depends on the amount resulting from the statistical analysis the correlation coefficient. Many researchers believe that the link which exceeds 0.8 guarantor tendency toward validity tool used coefficient....
Summary of the Chapter

This chapter has drawn the roadmap for this study. It explained the basic elements of the methodology and the methods of data collection and data analysis. Issues of sampling, validation and reliability have been discussed.