Chapter 3
Methodology of the Research

3.0Introduction:

The previous chapter reviewed the literature relevant to this study and some of the previous studies that have been done in the same field.

This chapter attempts to provide description of the study methodology. It focuses mainly on the subjects, the tools and the procedures of data collection.

In addition validity and reliability of the test will also be presented in this chapter.

3.1Subject:

The study population includes English language learners in some of Omdurman Secondary schools in the school year (2015-2016). Since it is difficult to collect the data from all the population, the researcher chooses a sample of one school which participated in the study.

The students of this school were all coming from the same background and share similar experience. Their age ranged from (16 to 18) years old and a number of 30 students were randomly selected to participate in this study.

3.2Instrument:

The researcher used a test as a method of data collection and gave it more emphasis because the students were the major target of the study, so the test was selected to assess the student's proficiency and also their ability in learning the vocabulary using semantic relations.

The test was given in the form of multiple choice,listening, fill in gaps and matching.

3.3 The Validity and Reliability of the Test:

Reliability is defined as the extent to which test or any measurement procedure produces the same results on repeated trials.

Validity is defined as the extent to which the instrument measures what it purports to measure and calculate in many ways represents the easiest being the square root of the reliability coefficient. The researcher knows that the validity of any tool is determining whether it is accurate or not, for this reason the researcher consulted four experts in the field of linguistics and also a number of teachers in the field of ELT.

He distributed copies of the test to these experts to give their judgments, opinions and advices about this tool.

The experts referred to were all PhD holders working at Sudan University of Science and Technology in some of its facultiesarts, education and languages.

$$\text{Validity} = \sqrt{\text{Reliability}}$$

The researcher calculates the reliability coefficient of the scale used in the test by alpha equation and the results as follows:

Reliability and Validity**:**

Test	
Reliability coefficient	Validity coefficient
0.715	0.84

Source: prepared by researcher, using SPSS, 2015

Notes from the results table that all reliability and validity coefficients for the test is greater than (50%) and close to the one , this indicates that the test is characterized by high reliability and validity, and makes statistical analysis acceptable.