3.1 Methodology:

This chapter gives accent of the methodology that used in this study and provides answer to the research questions. The sample of the study is described and data collection instrument is explained. It describes the validity and reliability of the instrument that used to gather information.

3.2 The study sample:

Choosing a sample for a research is one of the salient procedures for providing answers raised by the study. The research sample is drawn from Sudan University of science and technology, first year’s students. This sample consists of (20) male and female students.

3.3 Tool of data collection:

The tool of any research is the instrument which any researchers use for collecting the required data for this study. The research depended on a test as consists of 20 questions, first year students at Sudan University of science and technology (SUST).

3.4 Validity and Reliability procedure.

3.4.1 Validity of test:

The test was first given to two experts at Sudan University of science and technology, college of Education, department of English. The revised and chilled its validity, all of them were PhD holders in English language teaching the experts have recommended that all statement covet and relevant. Consequently, in its final from the test consisted of 20 questions have format.
3.4.2 Reliability of test:

For ease of checking the reliability of the test, it was designed according to the following formats.
_for main choices (multiple choice).
_the test was distributed to a group of English lanqauge students, first year Sudan University of science and technology. This procedure was done by counting the frequenting of responses then the percentage of each response.
Statistical analysis

Statistical methods used:

To achieve the objectives of the study and to verify hypotheses, statistical methods were used the following:

1 - Charts.

2 - Frequency distribution of the answers.

3 - Percentages.

4 - Alpha equation, to calculate the reliability coefficient.

Reliability and Validity:

Stability means that measure give the same results if used more than once under similar conditions.

Reliability is defined as the extent to which a questionnaire, test, observation 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

\[
\text{Validity} = \sqrt{\text{Reliability}}
\]

Researcher calculates the reliability coefficient of the scale used in the questionnaire by alpha equation and the results as follows:
Reliability and Validity:

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>reliability coefficient</th>
<th>Validity coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.86</td>
<td>0.752</td>
</tr>
</tbody>
</table>

Source: prepared by researcher, using SPSS, 2016

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