**RESEARCH METHODOLOGY**

Quantitative research is the**methodology which researchers use to test theories about people’s attitudes and behaviours based on numerical and statistical evidence.** Researchers sample a large number of users (e.g., through surveys) to indirectly obtain measurable, bias-free data about users in relevant situations.

**STATISTICAL TREATMENT OF DATA**

**FOR MARITIME SECTOR FACILITY CHECKLIST**

The following statistical tools should be used to examine the relationship of the variables of the Maritime Sector Facility Checklist.

To measure the rating of the facilities of General Housekeeping, Safety Equipment, Travel Areas and the GAD Facilities, such as Restroom (Female, Male, All Gender and PWD), Nursing mother/Diaper Changing, Kids Corner, Prayer/ Worship/ Chapel, Clinic are in terms of their respective sub parameters.

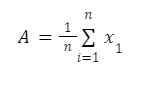
Each item under of their sub parameter will be tabulated and computed for its mean value. The summation of the computed mean value will be calculated. The sum will be tabulated and rank accordingly with “**4**” indicating **Excellent** and “**1**” indicates **Poor**.

The Likert 4 point scales will be used to indicate corresponding descriptive equivalent of the weighted means. The descriptive equivalents are presented in the following.

**Likert 4 Point Scale**

|  |  |  |  |
| --- | --- | --- | --- |
| **Ranking** | **Rating** | **Descriptive equivalent** | |
| 4 | 3.51 - 4.00 | Excellent | Outstanding (beyond acceptable; with accessories and decorations; well maintained; with vending machines, etc.) |
| 3 | 2.51 - 3.50 | Good | Acceptable (functioning and existing) |
| 2 | 1.51 - 2.50 | Fair | Existing but damaged or non-functional |
| 1 | 1.00 - 1.50 | Poor | Non-existent |

The formulas in computing the arithmetic mean of each item under each category is;



A = Average (or arithmetic mean)

n = the number of terms

x1 = the value of each individual item in the list of numbers being averaged

**The Frequency distribution.** Will tally all the data to be gathered based on the rating of the auditor from the sub parameters.

**The Ranking.** To determine the ranking of sub parameter, Likert scale. In case of a tie in ranking, the item who takes more frequency distribution in the highest descriptive interpretation will rank ahead of the other item.

**The Percentage.** To get the percentage per category.

Formula P = (F/N) x 100

Where: P = Percentage

N = Population/Auditor

F = Frequency

100 = Constant