A Study on Evaluation of Training Effectiveness among Employees in M/S Addison & Co., Ltd., Chennai

Dr.S.Vadivelu

Dean, Department of Management Studies, Bharath University, Chennai, Tamil Nadu, India
Email: drsvadivelu2012@gmail.com

Abstract

The main aim of the study is to prepare the employees both new and existing to meet the present as well as the changing requirements of the organization.Training programme helps to remove performance deficiencies of employees. The effectiveness of the training programme ensures there is greater stability, flexibility and capacity for growth of the organization. Training programme contributes to employee's stability.Employees become efficient after training programme. Efficient employees contribute to the growth of the company. Growth renders stability to the work force and trained employees tend to stay with the company and seldom leave the company.Training programmes make the employees versatile in operations. Growth in employees indicates prosperity, which is reflected in increased profits from year to year and only well-trained employees can contribute to the prosperity of an enterprise.

Introduction:

Addison & Company was established in the year 1973. It is a unit company of Amalgamation Ltd., which is one of the largest Engineering groups in India and largest manufacture of High Speed Steel (HSS) metal cutting tools. The company was incorporated on 26th November 1873 under the name and style of ADDISON & COMPANY LIMITED and obtained certificate of commencement of business from the Registrar of Companies, Madras on 27th December 1873. The company is managed by Board of Directors, namely:

Addison & Company manufactures Precision cutting tools – twist drills, milling cutters, reamers, thread taps and carbide-tipped tools. These are the tools that are basic to virtually any engineering industry, from Aircraft to Watches. Whether the operation involves constructing industrial boilers, boring cylinders in an engine block building ships, making textile machinery or fashioning delicate watch case, the appropriate cutting tools is the starting point.

Addison enjoys a strong market position in the domestic market. Distribution is done through the company's own branches in Ahmadabad, Bangalore, Mumbai, Kolkata, Ernakulum, Ludhiana, Chennai and New Delhi supported by countrywide dealers.

Addison also exports a wide range of HSS tools to countries such as US, Canada, Europe, Central/South America and South East Asian countries.

Addison & Company has the proud accomplishment of ISO 2002 Quality systems from TUV Germany.

To achieve customer satisfaction by supplying products that meet customer needs consistently by way of conformance to specifications, competitive pricing and good services.

It is recognized that this requires:
- Total management commitment
- Total involvement of all employees
- Good customer and supplier relationships
- Proper systems and procedures.

And this is achieved by:
- Emphasis on prevention than detection of defects and variations after occurrence.
- Continuous education and development of all employees through training.
- Upgrading of technology and appropriate to the changing needs of customer.

Personnel Department:

Personnel department is one of the main service departments of the organization. The key function of this department includes:
- Recruitment, Training and Development
- Personnel administration
- Welfare administration
- Safety, health hygiene
- Industrial relations
- Time office functions.

Marketing Department:

This division is responsible for marketing operations both in India and abroad. This division is categorized into

domestic and export department.

TRAINING:

Training is a process of learning a sequence of programmed behavior. It is application of knowledge, which gives people awareness of the rules and procedures to guide their behavior.

Training may be defined as a planned programme designed to improve performance and to bring about measurable changes in knowledge, skills, attitude and social behavior of employees for doing a particular job.

It is the short term process utilizing a systematic and organized procedure by which non-managerial personnel learn technical knowledge and skills for a definite purpose.

DEFINITION OF TRAINING:

According to Planty, Cord and Efferson, "Training is the continuous, systematic development among all employees of that knowledge and their skills and attitudes which contribute to their welfare and that of the company".

CONCEPTS OF TRAINING:

Since training is a continuous process and consumes time and entails much expenditure, it is necessary that a training programme or policy should be prepared with great thought and care, for it should serve the purpose of the establishment as well as the needs of employees.

A successful training programme presumes that sufficient care has been taken to discover areas in which it is needed most and to create the necessary environment for its conduct.

NEED FOR TRAINING:
- To increase the productivity and quality to help the company to fulfill its personnel needs.
- To improve organizational climate.
- To improve the health and safety of employees.
- To meet the technological advances.

OBJECTIVES OF TRAINING:
- To prepare the employee, both new and old to meet the present as well as the changing requirements of the job and organization.
- To prevent obsolescence.
- To prepare employees for higher level tasks.
- To assist employees to function more effectively in their present positions by exposing them to the latest concepts, information and techniques and developing the skills they will need on their particular fields.
- To impart the new entrants the basic knowledge and skills they need for an intelligent performance of a definite job.

EVALUATION OF TRAINING:

Hamblin defines evaluation of training as "any attempt to obtain information (feedback) on the effects of a training programme and to assess the value of the training in the light of that information".

NEED FOR TRAINING EVALUATION:
- To determine whether the programme is a accomplishing its objectives.
- To determine the cost and benefit ratio of the programme.
- To test the validity and the clarity of the content.
- To identify which participant benefited the most or the least.
- To develop any future programme.
- To decide who should participate in future.

NEED FOR THE STUDY:

Addison would strive to be the preferred supplier of high quality metal cutting tools in India and abroad through the adoption of state-of-the art technology, Research & Development, efforts and processes.

Addison shall continue to strengthen its presence in the field of machine tools and machine castings through technology absorption. The company shall also widen its product range by offerings like broaches and gear cutting tools.

Addison's vision is to sustain its responsible commercial success as a global manufacture of high

quality cutting tools so they conduct continuous training and development for all the employees.

Through training, they emphasis on prevention and detection of defects and variations after occurrence. In order to do upgradation of technology appropriate to changing needs of the customers, the company has been concentrating more on conducting training programmes.

Thus resulting in this project is to analyze and evaluate the training effectiveness among the employees.

OBJECTIVES OF THE STUDY:
PRIMARY OBJECTIVE:
- To study the effectiveness of training program in Addison & Co.

SECONDARY OBJECTIVES:
- To analyze the employees views and opinion regarding training.
- To study the effectiveness of training resources like materials, trainer etc.
- To find out the changes in employees work like quality of work after the training.

THE STUDY DESIGN
The study design refers to the conceptual structure within which research is conducted. A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine towards research purpose.
It follows these steps:
- The means of obtaining information
- Skills or researcher
- Methodology to collect data
- Cost factor relating to research

A research design can be specified as, "Arrangement of conditions and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. It constitutes blue print for the collection, measurement and analysis".

DATA COLLECTION METHOD:
For any study, the collection of data must be relevant to the problem. The task of data collection begins after a research problem has been defined and research design/plan chalked out. While deciding about the method of data collection to be used for the study, the researcher should keep in mind two types of data PRIMARY and SECONDARY.

PRIMARY DATA:
Primary data are those, which are collected afresh and for the first time and thus happen to be original in character. In this method the researcher is going to use pre-tested structured questionnaire method to collect primary data.

SECONDARY DATA
Secondary data on the other hand, are the information which have already been collected by someone else rather than involved in the research project at hand. In this the researcher has collected the secondary data from various books and company brochures.

SAMPLE SIZE
According to Goode and Hatte, "a sample is a smaller representation of larger whole". A sample contains primary sampling units and a slice of the population representing the universe.

In this the sample size is 100. Sizes are mainly decided on the basis of the selection statistical tools. The selection of the appropriate sample size can be done by statistical stool.

STATISTICAL TOOL
By statistics we mean that the aggregate of facts to marked extend by multiplicity of causes, numerically expressed, enumerated of estimated according to reasonable standard of accuracy, collected in a systematic manner for a pre determined purpose and place in relation to each other.

In this study Percentage analysis, bar diagrams, pie chart and Chi-Square are applied by the researcher.

PERCENTAGE ANALYSIS:
In this the position of the individual observation in a distribution is described. The most convention for

describing the position of an individual score in the distribution of score is percentage method.

Percentage N = 100* (cumulative fi/n)

CHI-SQUARE METHOD:

Chi Square is a non-parametric test of statistical significance for bivariate tabular analysis. Any appropriately performed test of statistical significance lets one know the degree of confidence one can know the degree of confidence one can have in accepting or rejecting a hypothesis. It enables us to explain whether two attributes are associated or not Chi Square is calculated as follows:

$$= E (O_{ij} - E_{ij})/E_{ij}$$

O_{ij} = observed frequency of the cell in the ith row and jth column.

E_{ij} = expected frequency of the cell in the ith row and jth column.

CHI – SQUARE

Training improves productivity / Training improves Quality of work	Strongly agree	Agree	Uncertain	Disagree	Total
Strongly agree	11	17	0	1	29
Agree	17	29	2	1	49
Uncertain	2	9	5	1	17
Disagree	1	4	0	0	5
Total	31	29	7	3	100

Null Hypothesis (H_0): There is no significant relationship between the training improves productivity and training improves quality of work. Alternate Hypothesis (H_1): There is a significant relationship between the training improves productivity and training improves quality of work.

ROW TOTAL * COLUMN TOTAL

EXPECTED FREQUENCY (Ei) = ─────────────────────────────

GRAND TOTAL

Observed Frequency (O)	Expected Frequency (E)	(O-E)	(O-E)²	(O-E)²/E
11	8.99	2.01	4.04	0.449
17	15.19	1.81	3.27	0.216
2	5.27	-3.27	10.693	2.03
1	1.55	-0.55	0.3025	0.195
17	17.11	-0.11	0.0121	0.0007
29	28.91	0.99	0.0081	0.00028
9	10.03	-1.03	1.0609	0.106
4	2.95	1.05	1.1025	0.374
0	2.03	-2.03	4.1209	2.03
2	3.43	-1.43	2.0449	0.596
5	1.19	3.81	14.5161	12.19
0	0.35	-0.35	0.1225	0.35
1	0.87	0.13	0.0169	0.019
1	1.47	-0.47	0.2209	0.150
1	0.51	0.49	0.2401	0.4701
0	0.15	-0.15	0.0225	0.15
				19.33

Degree of Freedom = (r-1) (c-1)   = (4-1) (4-1) = 9

The calculated value = 19.33

The table value = 16.919 at 5% level of significance

$$X^2 = \sum (0 - E)^2 / E = 19.33$$

The table value of x2 for 9 degree of freedom at 5% level of significance is 16.919. The calculated value is greater the table value. So the alternate hypothesis taken is accepted, and we can conclude it, as there is a significant relationship between the training improves productivity and training improves quality of work.

RANKING OF THE EFFECTIVE TRAINING PROGRAMME

Reason	1	2	3	4	5	No. of respondents	Total Weighted Average	Weighted Average	Rank
Technical	33	21	19	17	10	100	350	35.0	1
Behavioral	6	32	29	21	12	100	299	29.9	4
Quality / System	19	21	33	12	15	100	317	31.7	2
Safety	13	26	32	18	11	100	312	31.2	3

INTERPERTATION

Majority number of employees ranked first the technical training programme conducted by the company to be effective.

CONCLUSION

Every organization needs to have well-trained and experience people to perform the activities that have to be done. As jobs have been more complex, the importance of employees training has increased.

Training is the act, which increase the knowledge and skill of an employee for doing a particular job. Thus training will be presented as it applies primarily to operative employee in the organization.

This study helps the organization to implement some new strategies to make the training programme effective.

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  PERSONNEL AND HUMAN RESOURCE MANAGEMENT
  Himalaya Publishing House
  Mumbai – 400 004.
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- **C.R. KOTHARI**
  RESEARCH METHODOLOGY
  New Age International Publishers, New Delhi

TABLE 1
AGE - WISE CLASSIFICATION OF THE RESPONDENTS

Age of the employees	No. of Respondents	Percentage
18 – 25	6	6
26 – 35	20	20
36 - 45	56	56
Above	18	18
Total	**100**	**100**

INTERPRETATION

The above table shows that 6% of the respondents are in age group of 18-25, 20% of them are in age group of 26-35, and 56% of them are in age group of 36-45 and 18% of respondents are above 45.
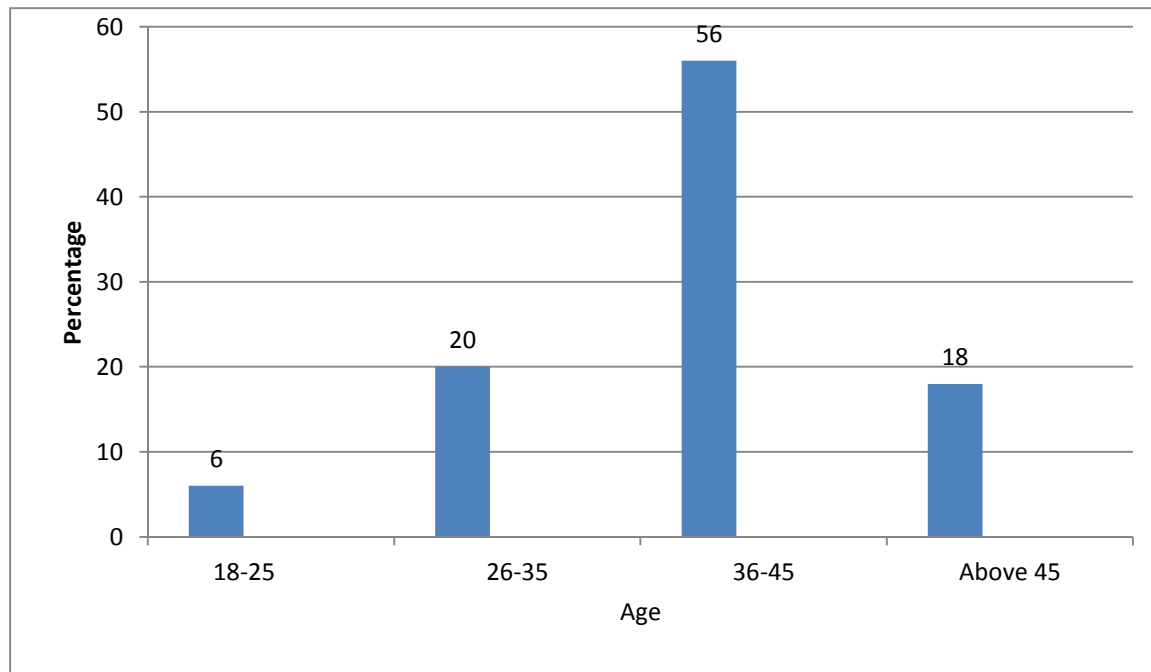
FIGURE 1
AGE - WISE CLASSIFICATION OF THE RESPONDENTS

TABLE 2
EDUCATIONAL QUALIFICATION OF THE RESPONDENTS

Educational qualification	No. of Respondents	Percentage
12th	18	18
I.T.I.	52	52
Diploma	22	22
Others	8	8
Total	**100**	**100**

INTERPRETATION:

The above table shows that 18% of the respondents have qualification of 12th, 52% of them have qualification of I.T.I., 22% of them have qualification of diploma and 8% of respondents have other qualification.

FIGURE 2
EDUCATIONAL QUALIFICATION OF THE RESPONDENTS
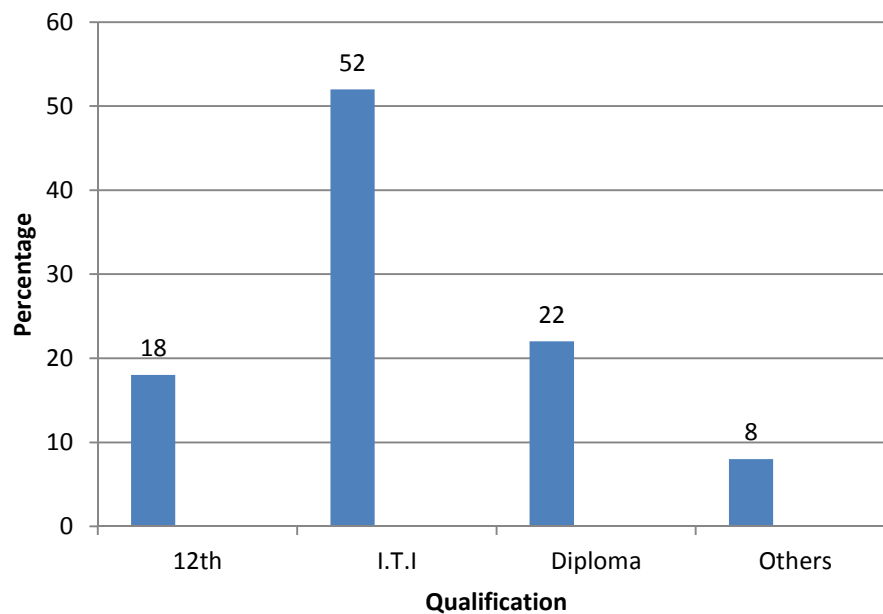
TABLE 3
EXPERIENCE OF THE EMPLOYEES

Experience	No. of Respondents	Percentage
Below 2 yrs.	4	4
2-8 yrs	11	11
8-15 yrs	37	37
14-20 yrs	29	29
Above 20 yrs	19	19
Total	**100**	**100**

INTERPRETTION:

The above table shows that 4% of the respondents are having below 2 yrs of experience, 11% of them having 2-8 yrs experience, 37% of them having 8-14 yrs of experience, 29% of respondents having 14-20% and 19% are having 20 yrs of experience.

FIGURE 3
EXPERIENCE OF THE EMPLOYEES
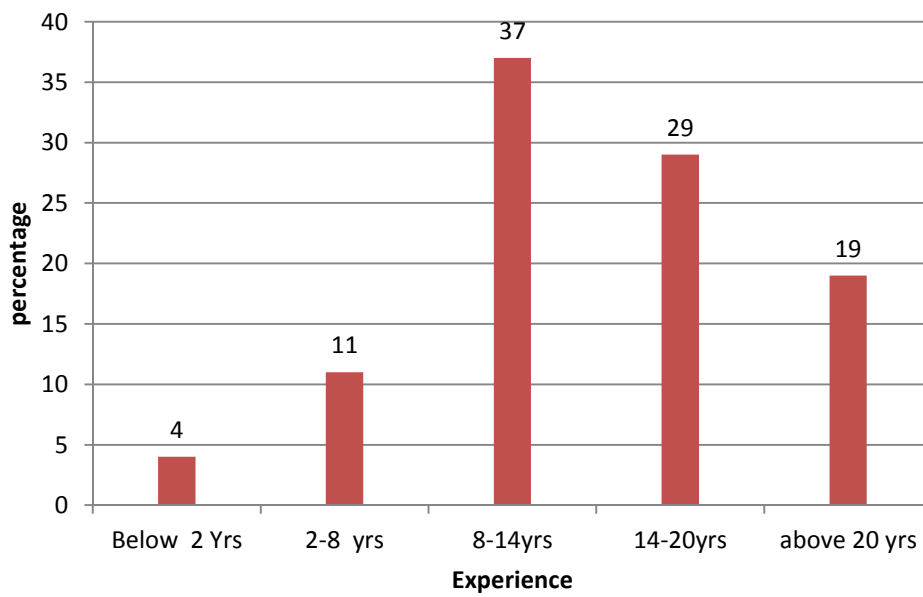
TABLE 4
NUMBER OF TRAINING PROGRAMMES ATTENDED

Number of Training Programmes	No. of Respondents	Percentage
1 – 3	17	17
4 – 6	77	77
7 – 9	6	6
Above 10	0	0
Total	**100**	**100**

INTERPRETATION:

The above table shows that 17% of the respondents have attended 1-3 training programmes, 77% of them 4-6 training programmes, and 6% of them attended 7-9 training programmes.

FIGURE 4
NUMBER OF TRAINING PROGRAMMES ATTENDED
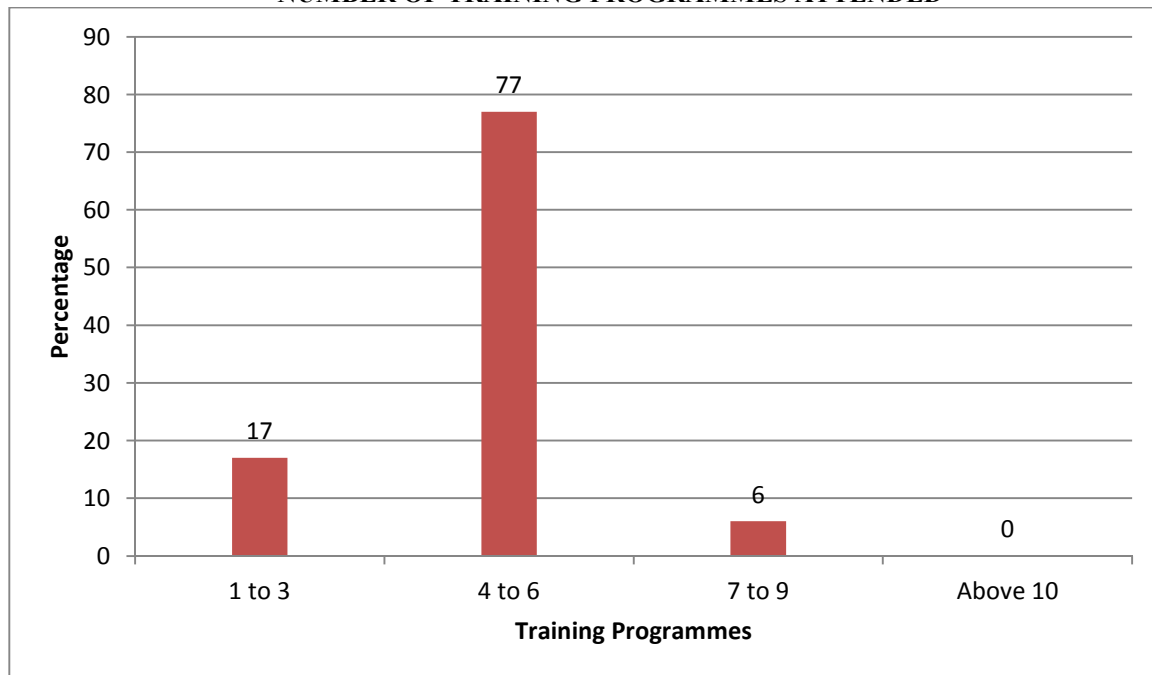
TABLE 5
KIND OF TRAINING PROGRAMMES ATTENDED

Training Programmes	No. of Respondents	Percentage
Technical	47	47
Behavioral	13	13
Quality / System	23	23
Safety	17	17
Total	**100**	**100**

INTERPRETATION

The above table states that 47% of the respondents have attended technical training programmes, 13% of them attended behavioral training programmes, 23% of them attended quality / system training programme and 17% of them attended safety training programmes.

FIGURE 5
KINDS OF TRAINING PROGRAMMES ATTENDED
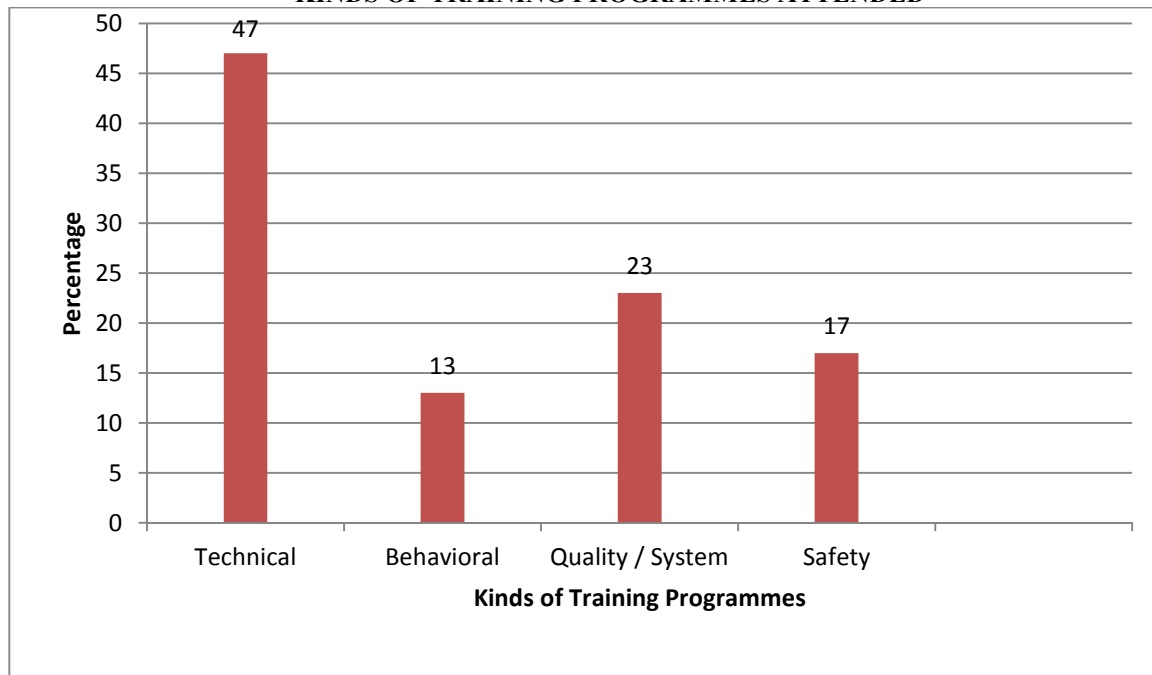
TABLE 6
SATISFACTION LEVEL WITH TRAINING CONTENT

Satisfaction level	No. of Respondents	Percentage
Highly satisfied	29	29
Satisfied	58	58
Uncertain	6	6
Dissatisfied	7	7
Total	**100**	**100**

INTERPRETATION

The above table states that 29% of the employees said that they are highly satisfied with the training content, 58% of them said satisfied, 6% of them are uncertain and 7% of them are dissatisfied.

FIGURE 6
SATISFACTION LEVEL WITH TRAINING CONTENT
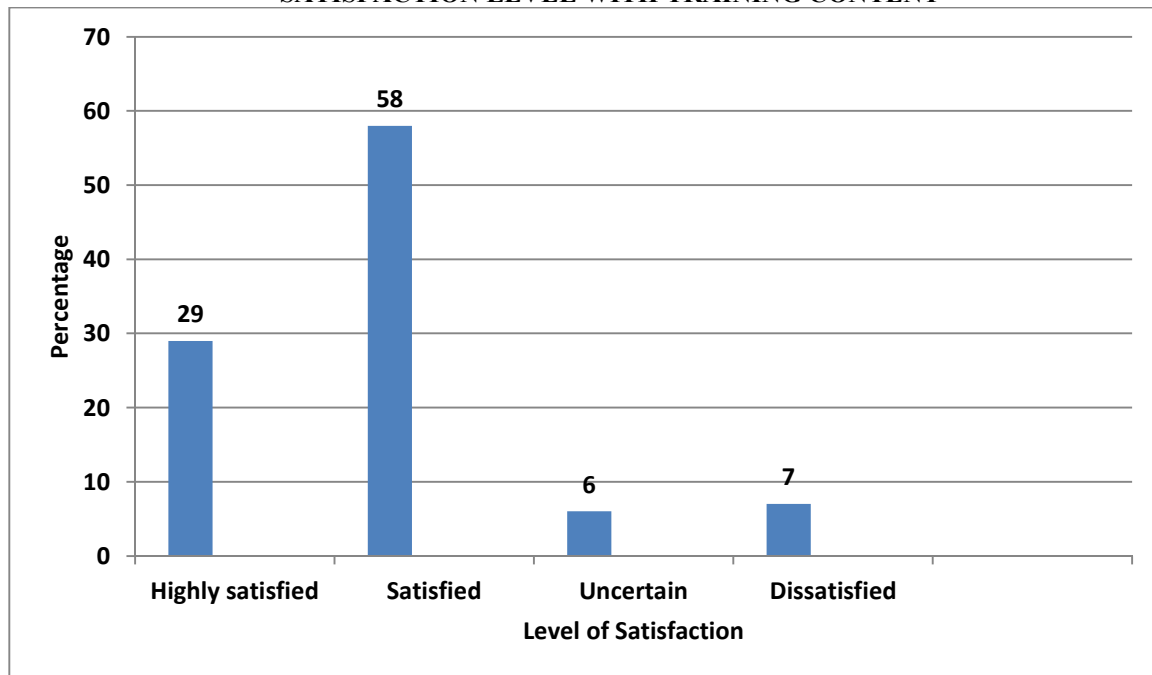
TABLE 7
ADEQUATE LEARNING MATERIAL ARE PROVIDED FOR TRAINING

Response	No. of Respondents	Percentage
Strongly agree	40	40
Agree	47	47
Uncertain	9	9
Disagree	4	4
Total	**100**	**100**

INTERPRETATION

The above table states that 40% of the employees strongly agreed that adequate training material is provided for training , 47% of them agreed, 9% of them are uncertain and 4% of them disagreed that adequate training materials is provided for training.

FIGURE 7
ADEQUATE LEARNING MATERIAL ARE PROVIDED FOR TRAINING
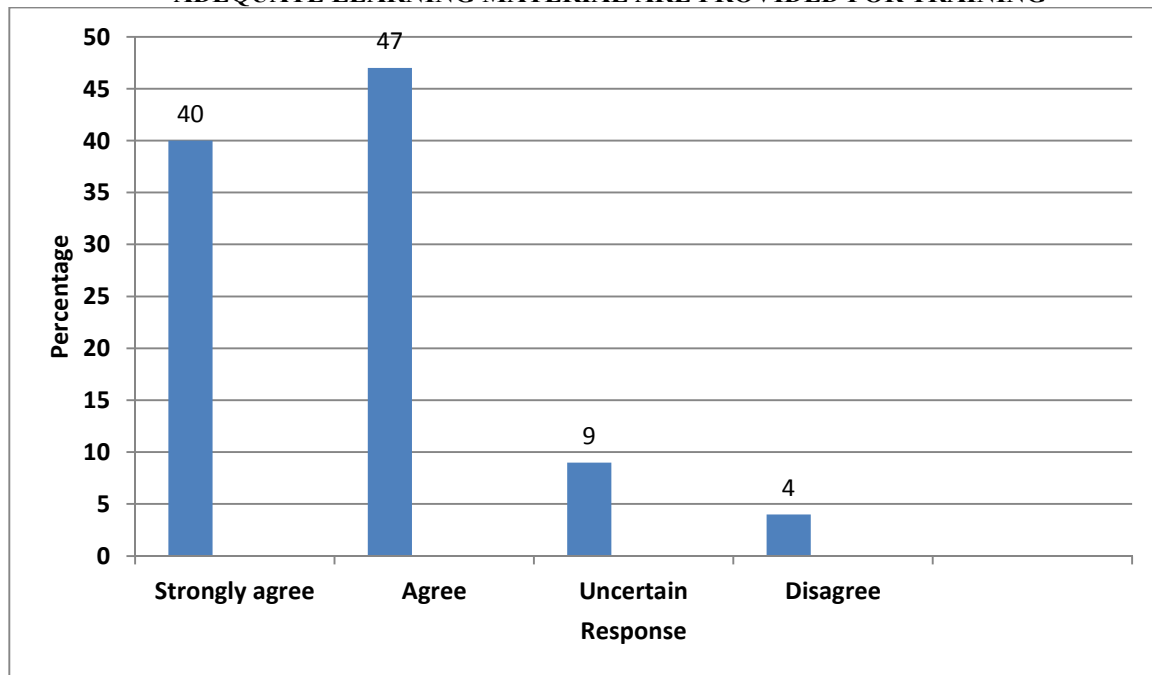
TABLE 8
EFFECTIVENESS OF TRAINERS IN THE TRAINING PROGRAMME

Effectiveness	No. of Respondents	Percentage
Very good	27	27
Good	53	53
Satisfied	11	11
Poor	9	9
Total	**100**	**100**

INTERPRETATION

The above table states that 27% of the employees said that the effectiveness of trainers in the training programme is very good, 53% of them said good, 11% of them are satisfied and 9% of them said poor.

FIGURE 8
EFFECTIVENESS OF TRAINERS IN THE TRAINING PROGRAMME
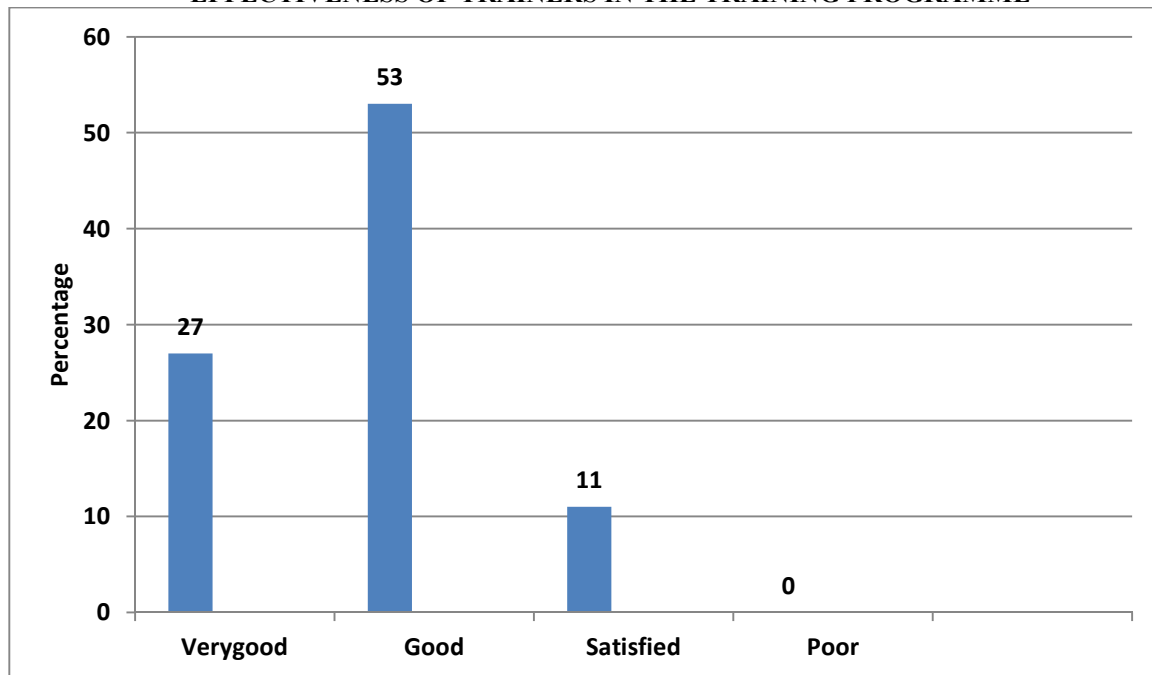
TABLE 9
DURATION OF THE TRAINING PROGRAMME IS COMFORTABLE

Response	No. of Respondents	Percentage
Strongly	17	17
Agree	67	67
Uncertain	7	7
Disagree	9	9
Total	**100**	**100**

INTERPRETATION

The above table that 17% of the employees strongly agreed that the duration of training programme is comfortable, 67% of them agreed, 7% of them are uncertain and 9% of them disagreed that the duration of training programme is comfortable.

FIGURE 9
DURATION OF THE TRAINING PROGRAMME IS COMFORTABLE
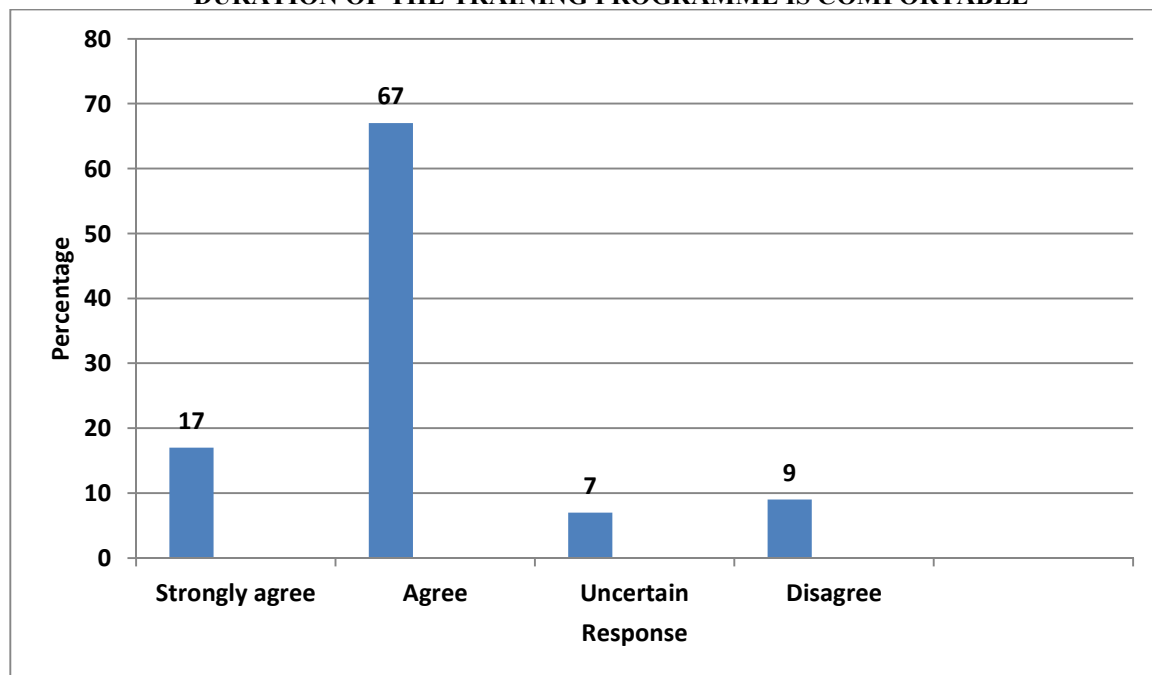
TABLE 10
RELEVANCE OF TRAINING TO THE JOB

Response	No. of Respondents	Percentage
Absolutely relevant	37	37
Relevant	47	47
Relevant to some extent	11	11
Not relevant	5	5
Total	**100**	**100**

INTERPRETATION

The above table states that 37% of the employees said that the training is absolutely relevant to the job, 47% of them said that it is relevant, 11% of them said that it is relevant to some extent and 5% of them said that it is not relevant at all.

FIGURE 10
RELEVANCE OF TRAINING TO THE JOB
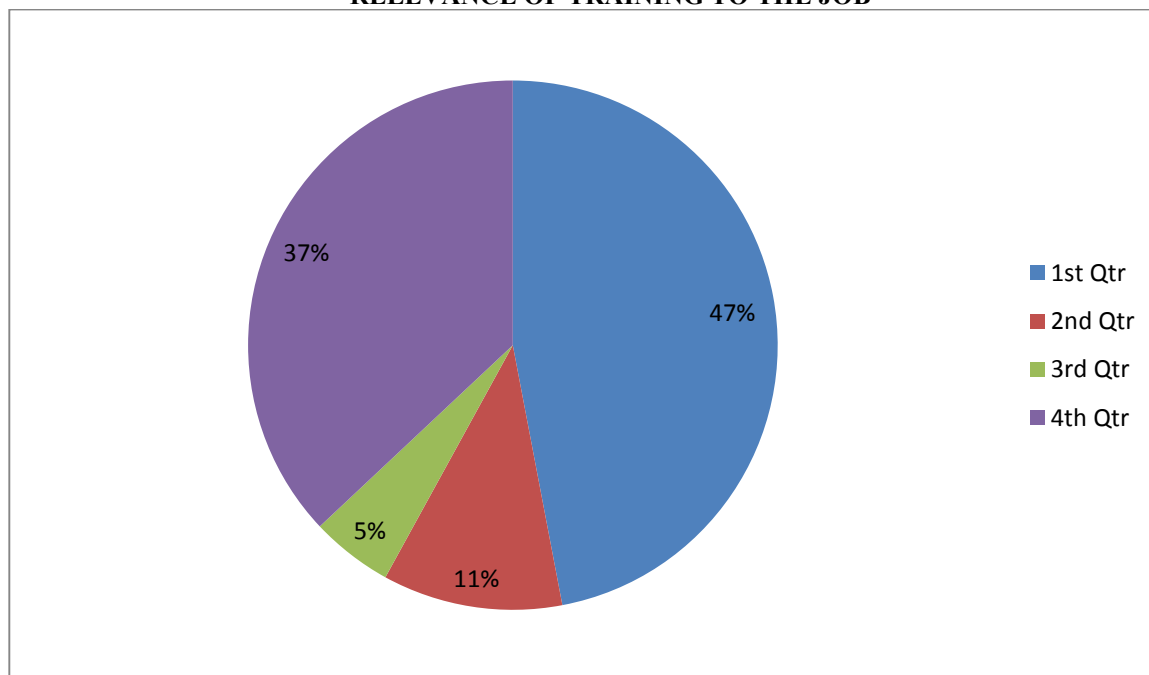
TABLE 11
TRAINING PROGRAMME HAS MADE A POSITIVE CHANGE

Response	No. of Respondents	percentage
Strongly agree	31	31
Agree	41	41
Uncertain	17	17
Disagree	11	11
Total	**100**	**100**

INTERPRETATION

The above table states that 31% of the employees strongly agreed that the training programme has made a positive change, 41% of them agreed, 17% of them are uncertain and 11% of them disagreed.

FIGURE 11
TRAINING PROGRAMME HAS MADE A POSITIVE CHANGE
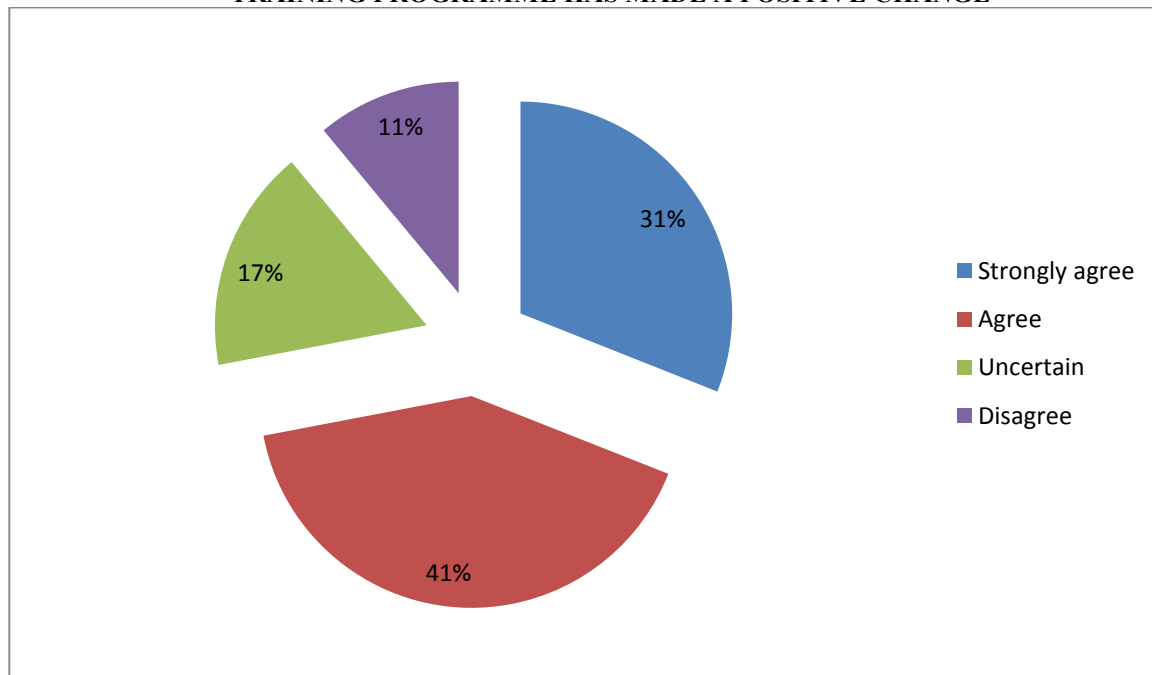
TABLE 12
TRAINING HELPS IN REDUCTION OF WASTAGE IN TIME AND MATERIAL

Response	No. of Respondents	Percentage
Strongly agree	31	31
Agree	58	58
Uncertain	9	9
Disagree	2	2
Total	**100**	**100**

INTERPRETATION

The above table states that 31% of the employees strongly agreed that the training helps in reduction of wastage in time and material, 58% of them agreed, 9% of them are uncertain and 2% disagreed that the training helps in reduction of wastage in time and material.

FIGURE 12
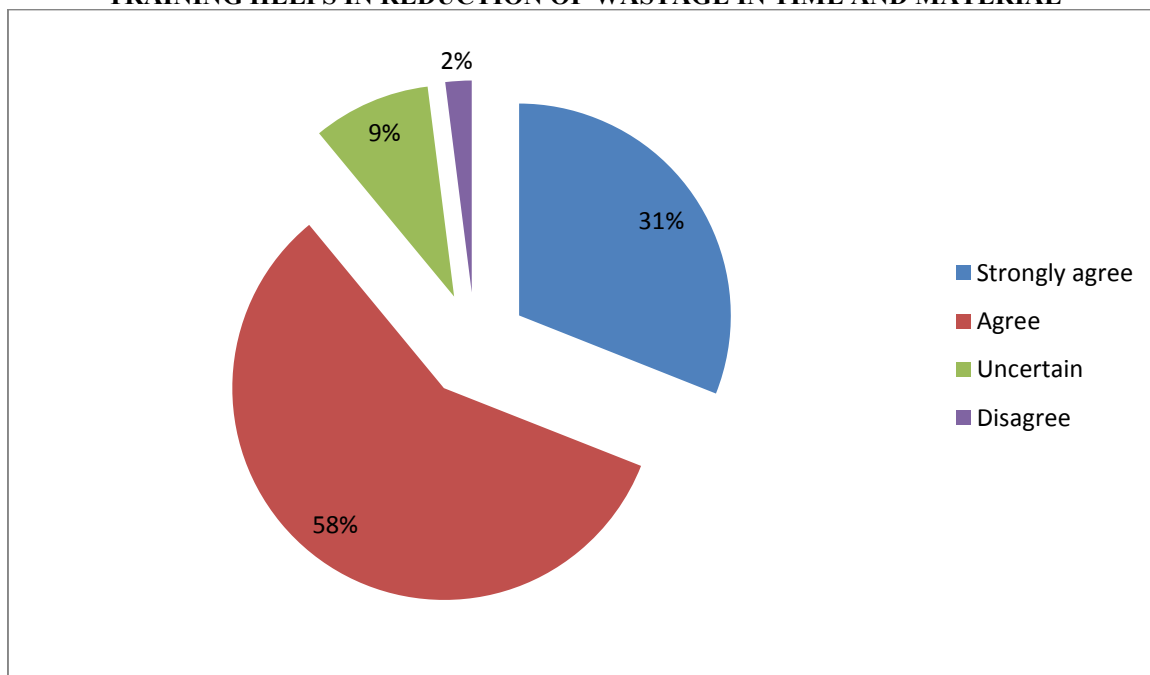**TRAINING HELPS IN REDUCTION OF WASTAGE IN TIME AND MATERIAL**

TABLE 13
TRAINING ENABLES SATISFACTION LEVEL WITH THE CURRENT WORK.

Response	No. of Respondents	Percentage
Highly satisfied	31	31
Satisfied	55	55
Uncertain	8	8
Dissatisfied	6	6
Total	**100**	**100**

INTERPRETATION

The above table states that 31% of the employees are highly satisfied with the current work after the training programme, 55% are satisfied, 8% of them are uncertain and 6% are dissatisfied with the current work after the training programme.

FIGURE 13
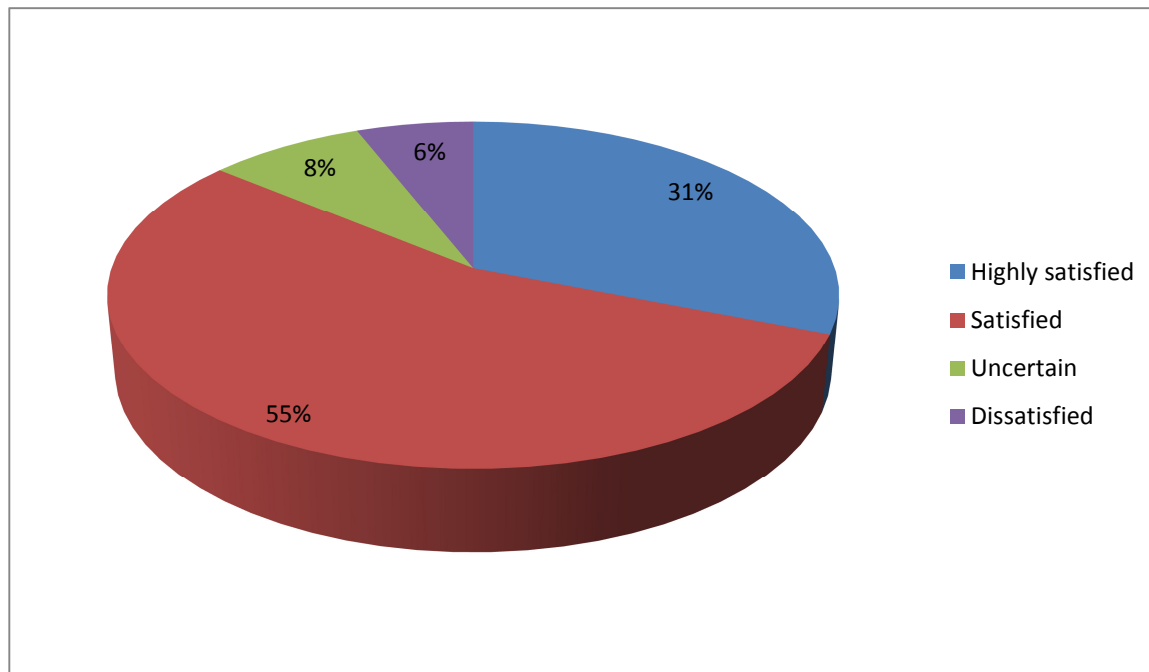**TRAINING ENABLES SATISFACTION LEVEL WITH THE CURRENT WORK**

TABLE 14
TRAINING FEEDBACK HELPS IN IMPROVEMENT

Response	No. of Respondents	Percentage
Strongly	29	29
Agree	63	63
Uncertain	7	7
Disagree	1	1
Total	**100**	**100**

INTERPRETATION
The above table states that 29% of the employees strongly agreed that training feedback helps in improvement, 63% of them agreed, 7% of them are uncertain and only 1% of them disagreed.

FIGURE 14
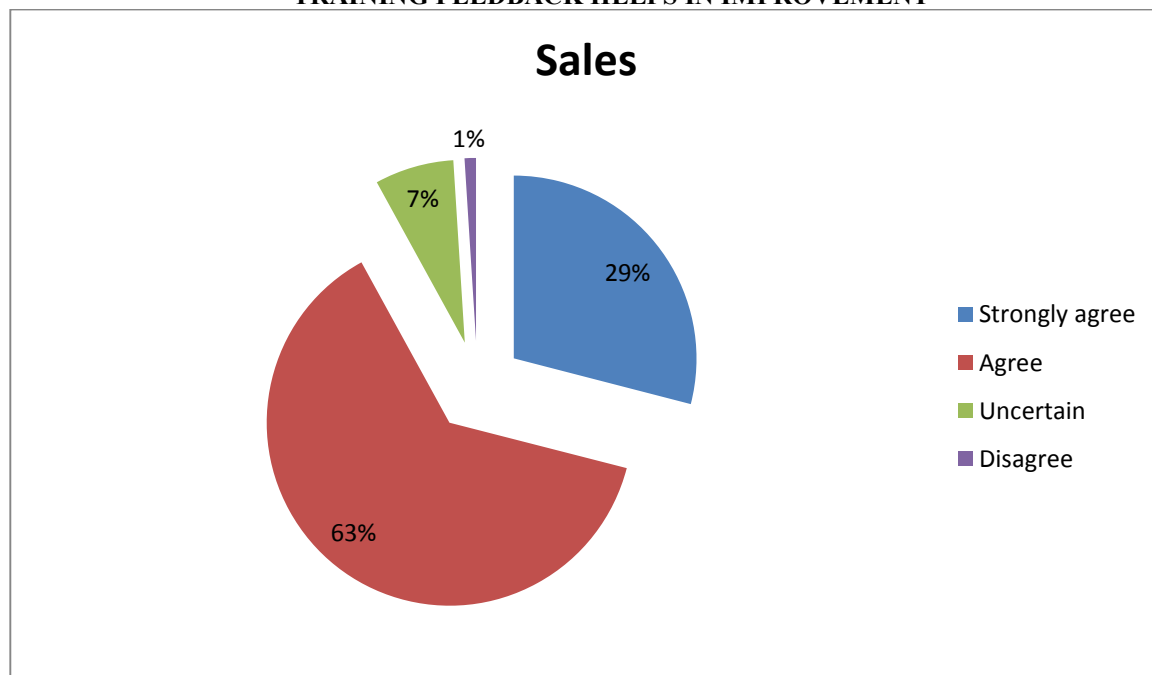**TRAINING FEEDBACK HELPS IN IMPROVEMENT**

TABLE 15
TRAINING PROGRAMME AIDS CAREER GROWTH

Response	No. of Respondents	Percentage
Strongly agree	21	21
Agree	52	52
Uncertain	19	19
Disagree	8	8
Total	**100**	**100**

INTERPRETATION

The above table states that 21% of the employees strongly agreed that training programme aids career growth, 52% of them agreed, 19% of them are uncertain and 8% of them disagreed that training programme aids career growth.

FIGURE 15
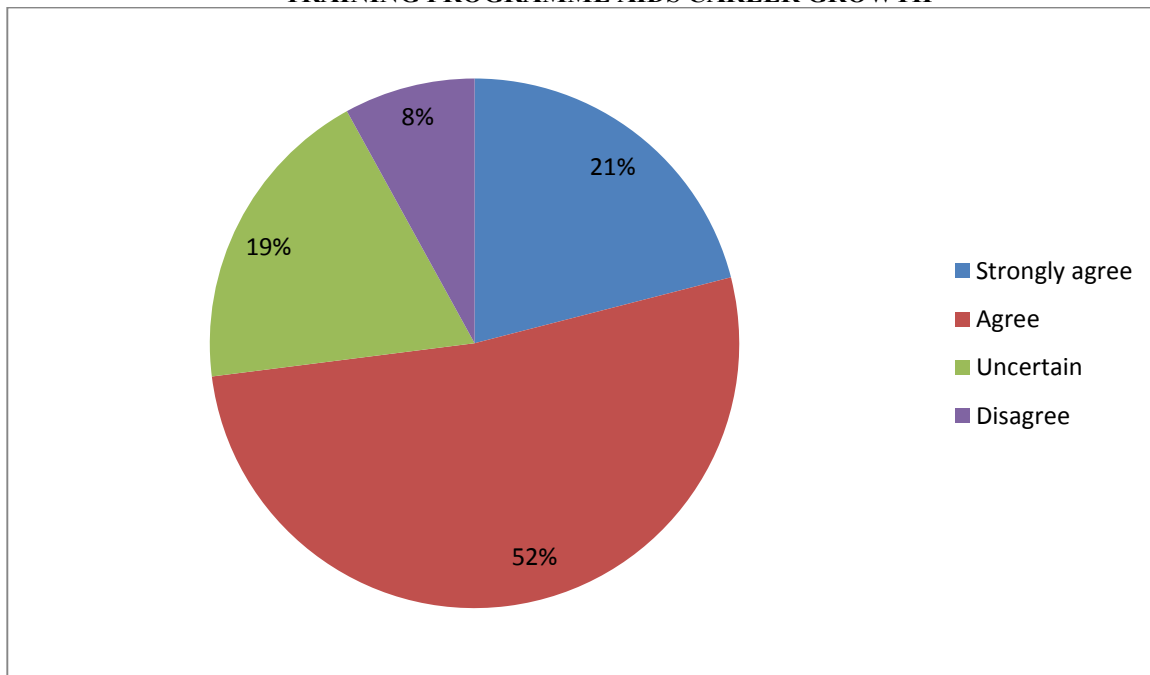**TRAINING PROGRAMME AIDS CAREER GROWTH**

TABLE 16
TRAINING IMPROVES PRODUCTIVITY

Response	No. of Respondents	Percentage
Strongly agree	**29**	**29**
Agree	49	49
Uncertain	17	17
Disagree	5	5
Total	**100**	**100**

INTERPRETATION

The above table states that 29% of the employees strongly agreed that training improves productivity, 49% of them agree, 17% of them are uncertain and 5% of them disagreed that training improves productivity.
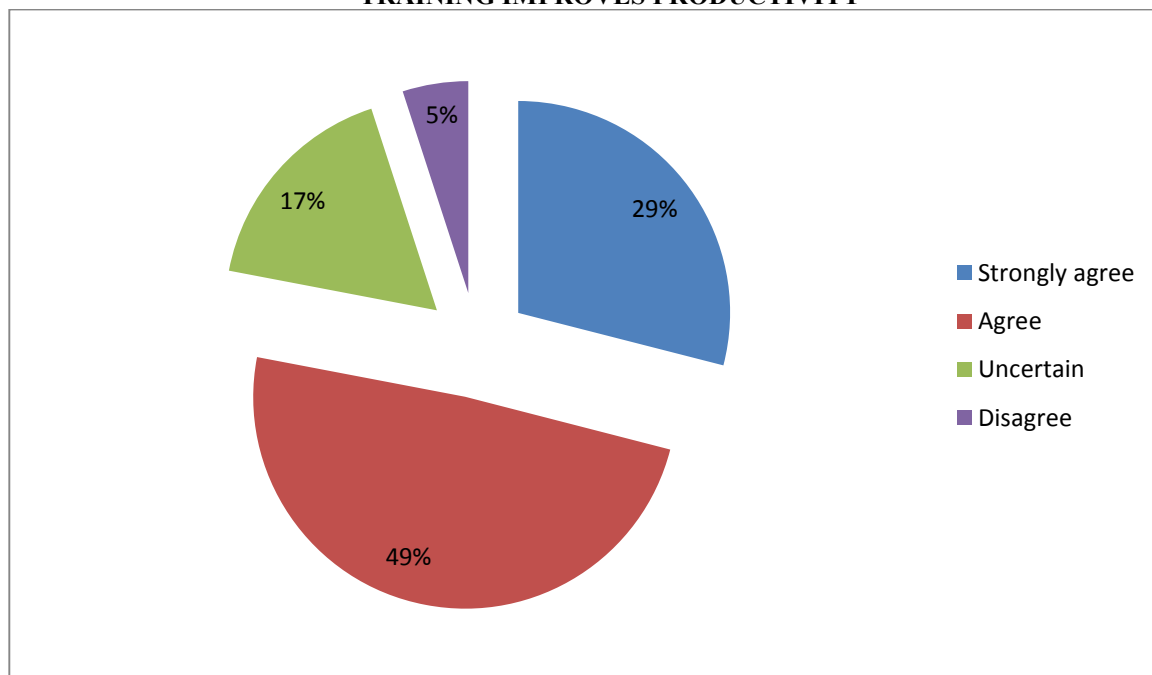
FIGURE 16
TRAINING IMPROVES PRODUCTIVITY

TABLE 17
TRAINING IMPROVES IN QUALITY OF WORK

Response	No. of Respondents	Percentage
Strongly agree	31	31
Agree	59	59
Uncertain	7	7
Disagree	3	3
Total	**100**	**100**

INTERPRETATION

The above table states that 31% of the employees strongly agreed that training improves in quality of work, 59% of them agreed, 7% of them are uncertain and 3% of them disagreed that training in quality of work.

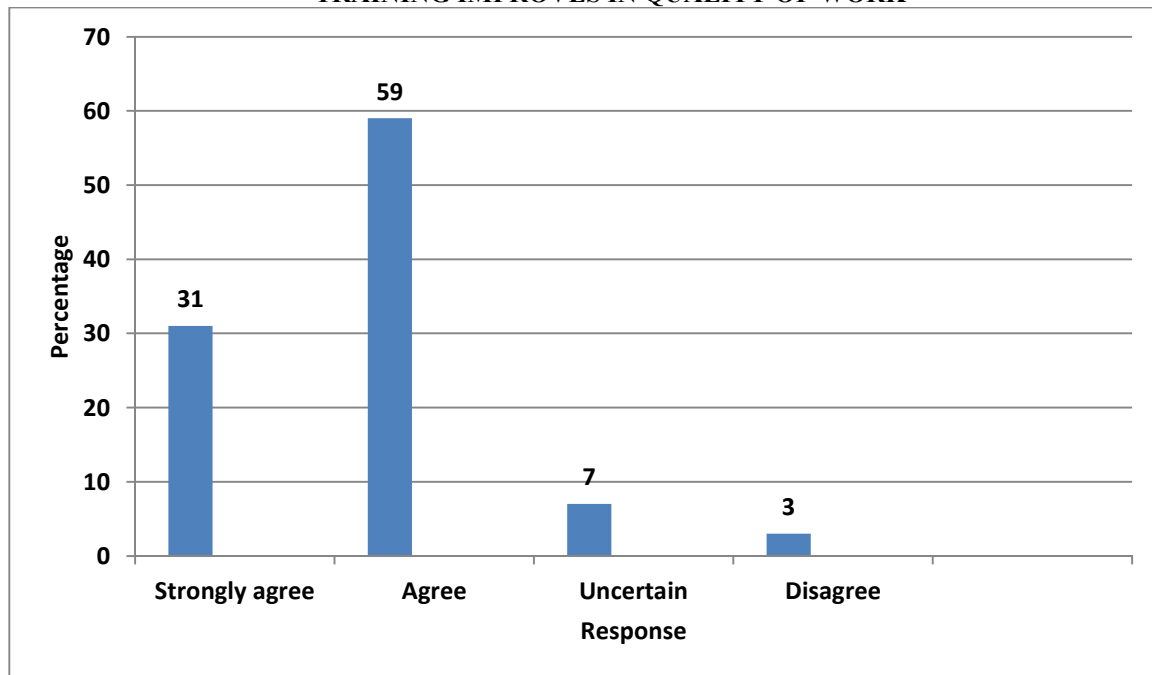**FIGURE 17**
TRAINING IMPROVES IN QUALITY OF WORK

TABLE 18
TRAINING PROGRAMME IMPROVES RELATIONSHIP WITH CO-WORKERS

Response	No. of Respondents	Percentage
Very good	30	30
Good	67	67
Satisfied	3	3
Poor	0	0
Total	**100**	**100**

INTERPERTATION:

The above table states that 30% of that 30% of the employees said that after the training programme relationship with the co-workers is very good, 67% said its good and 3% said that they are satisfied.

FIGURE 18
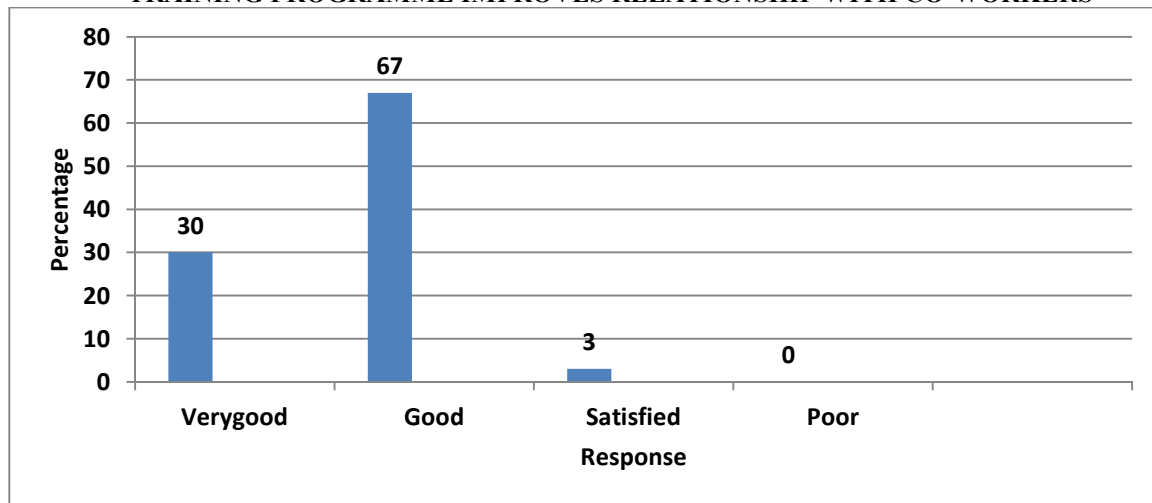**TRAINING PROGRAMME IMPROVES RELATIONSHIP WITH CO-WORKERS**

TABLE 19
TRAINING PROGRAMME IMPROVED WORK SAFETY

Response	No. of Respondents	Percentage
Strongly agree	37	37
Agree	57	57
Uncertain	5	5
Disagree	1	1
Total	**100**	**100**

INTERPERTATION

The above table states that 37 % of the employees strongly agreed that the training programme improved their work safety, 57% of them agreed, 5% of them are uncertain and only 1% disagreed that the training programmed improved their work safety.

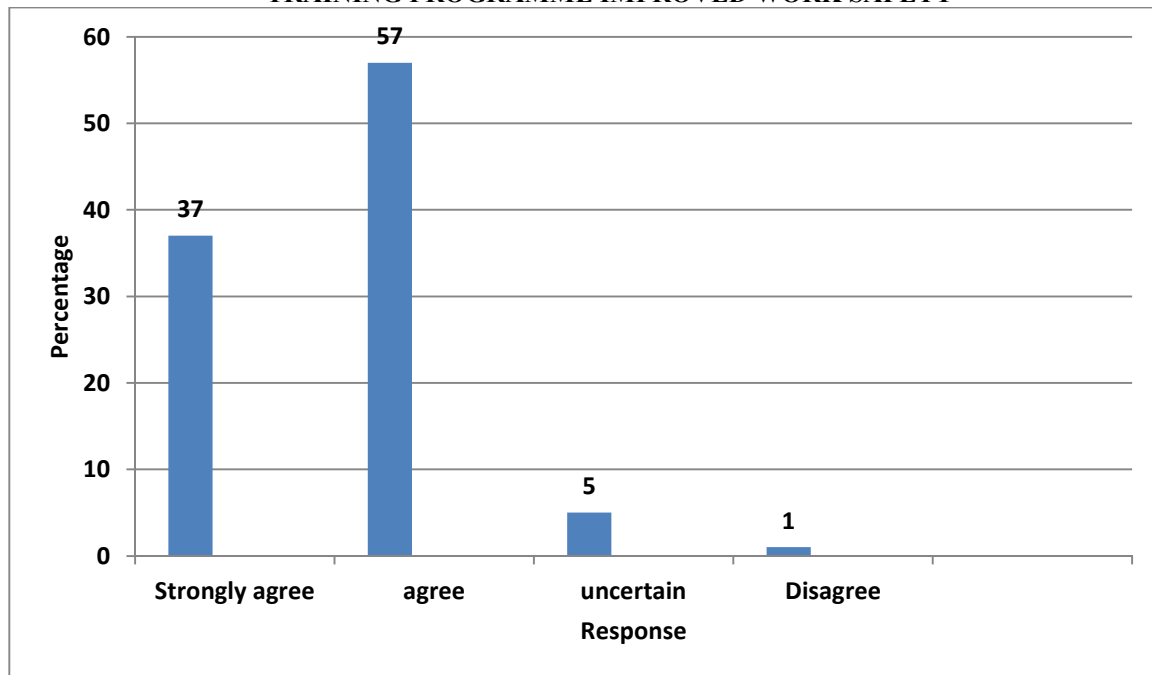**FIGURE 19**
TRAINING PROGRAMME IMPROVED WORK SAFETY

TABLE 20
TRAINING PROGRAMME AIDS IMPROVEMENT IN PERSONALITY AND ATTITUDE.

Response	No. of Respondents	Percentage
Strongly agree	27	27
Agree	49	49
Uncertain	19	19
Disagree	5	5
Total	**100**	**100**

INTERPERTATION

The above table states that 27% of the employees strongly agreed that the training programme aids in improvement in personality and attitude, 49% of them agreed, 19% of them are uncertain and 5% of them disagreed that the training programme aids in improvement in personality and attitude.

FIGURE 20
TRAINING PROGRAMME AIDS IMPROVEMENT IN PERSONALITY AND ATTITUDE.
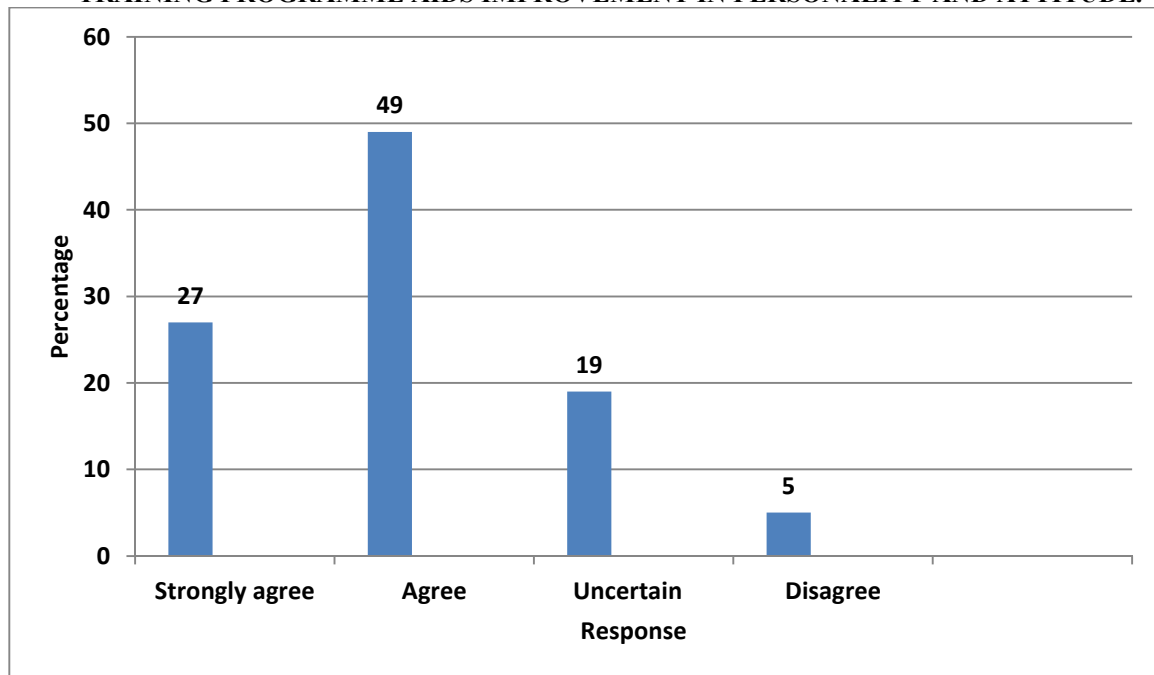
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