

**A STUDY ON AFTER SALE ON JOHNSON LIFTS
AND ESCALATORS
(SHOLINGANALLUR, PERUNGUDI, ADYAR ZONES)**

Submitted in partial fulfillment of the requirements for the award of

MASTER OF BUSINESS ADMINISTRATION

by

**PRAVEEN.T
Register No.40410125**



SCHOOL OF MANAGEMENT STUDIES

SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

**Accredited with Grade "A" by NAAC | 12B Status by UGC | Approved by AICTE
JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHENNAI - 600 119**

JANUARY 2022



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SCHOOL OF MANAGEMENT STUDIES

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **PRAVEEN.T 40410125** who carried out the project entitled "**A STUDY ON AFTER SALE ON JOHNSON LIFTS AND ESCALATORS**" under my supervision from January 2022 to March 2022.

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Submitted for Viva voce Examination held on_____

Internal Examiner

External Examiner

DECLARATION

I **PRAVEEN.T (40410125)** hereby declare that the Project Report entitled **“A STUDY ON AFTER SALE ON JOHNSON LIFTS AND ESCALATORS”** done by me under the guidance of **DR. RANI** is submitted in partial fulfillment of the requirements for the award of Master of Business Administration degree.

DATE:

PLACE:

PRAVEEN.T

ABSTRACT

The customer perception is a marketing concept that encompasses a customer's impression, awareness and consciousness about a company or its offerings. Customer perception is typically affected by advertising, reviews, public relations, social media, personal experiences and other channels, customer perception plays a vital role in company's ability to attract new customers and to retain existing customers.

ACKNOWLEDGEMENT

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PRAVEEN.T

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CHAPTER - 1

INTRODUCTION

Johnson is India's largest and leading lifts and Escalator Manufacturing Company with major market share in the Vertical Transportation needs of India's Infrastructure Industry. Founded in 1963 and headquartered at Chennai with 3 factories at Chennai and 1 at Nagpur and its operations spread across Pan India through 54 branches has shown its excellence in manufacturing in terms of Infrastructure, Production Capacity, R&D Capability, Quality & Reliability of Products, Timely Delivery-Installation, Service network and Modernization.

COMPANY PROFILE

JOHNSON LIFTS, manufacturers of lifts and escalators, based at Chennai are the market leaders in the Lift industry and they have multi factories and operations across pan India and Overseas. This leading and most popular brand leads the market as no.1 in sales turn over, over a decade against all renowned MNC'S. JOHNSON LIFTS is truly MADE IN INDIA Company established in 1963, and has been growing consistently year on year. Lift industry has been constantly growing with the urbanization and the consistent growth and expansion in tier 1 & 2 cities creating opportunities for housing, malls & commercial complexes. Along with it the growth in the public infrastructure systems like the modernization of airports, railway stations, metro line connectivities and foot over bridges in junctions has been pushing the industry to expand their manufacturing facilities and moreover created opportunities for technical man power increasing year on year. Since the lifts and escalators are technical products needing high level of periodical service and maintenance, trained & skilled man power in sufficient quantity has been a yearly requirement. Keeping this requirement in mind and to generate regular skilled man power for the industry and JOHNSON LIFTS being pioneer in this field with its social responsibility envisaged to develop a skill manpower pool through intensive engineering training by nurturing and molding students during the curriculum thereby build a career for individuals.

VISION

To delight customers in the Vertical transportation industry by ensuring a blissful experience throughout their association with the company.

MISSION

To be socially responsible leading vendors & associates. Manufacture of vertical transportation product in Indian market fulfilling prosperity of employees.

PRODUCT PROFILES

JOHNSON LIFTS, manufacturers of lifts and escalators, the lifts have two types of variants are the they are MR and MRL lifts MRL-Machine room less elevators, MR- Traction Lifts. There are several varieties of MR lifts are available. They are Nextra, Nextra express, Scenic, Enduronic, Basics, Evergreen, Goods Lifts, Car lifts and Hospital Lifts. And in MRL lifts there are Sukranti, Mini sukranti MR, Mini sukranti LR, Easy Ride, Hospital Lifts. In Escalators there are two types Commercial and Heavy Duty.

NEED FOR THE STUDY

The study helps in knowing the awareness and satisfaction and also the perception of consumers towards JOHNSON LIFTS. It also helps to analyse the dealer's attitude towards the service and benefits rendered by the company. This study also helps the graduates and the researchers who would like to increase their knowledge on the subject which might be of help in the future while looking for works.

SCOPE OF STUDY

The scope of the study is to find out the After-Sale service in Johnson Lifts and Escalators. The study covers the different aspects of Sale Services.

OBJECTIVES OF THE STUDY

- To Study after-sale service in Johnson lifts and escalators.
- To Study about Employees or customer service staff Service.
- To Study about like most about our Service.
- Value added service
- Satisfaction of service

LIMITATION OF STUDY

Every study will have its own limitation. Some among such limitations of this study are:

- Limited sample size
- As the data is collected from a few, it may not prove the view of entire population
- The survey was time-consuming
- Possible sampling error

CHAPTER 2

REVIEW OF LITERATURE

- Johnson Lifts, a Manufacturer of lifts and escalators, has come out with an innovation that enable users to operate lifts without touching the buttons. It is the second company to do so after Kone Elevator India, that introduced a mobile app last week. “Our design and development team has developed a smartphone app EyeRIS that allow users to have a contactless lift usage experience, Crucial in these times when COVID-19 is forcing us to look at our lives differently,” said the firms **ED V. Jagannathan**.
- Electric Elevators, by **Fred A. Annett**, originally published by McGraw-Hill, New York, 1960, and republished by Elevator World Magazine. This book was one of the first efforts to compile a volume on the many aspects of elevators, especially from a technical standpoint. Mr. Annett was an editor of Power Magazine during the 1950s and 1960s, and the first edition of Electric Elevators was a compilation of various articles published in that magazine. Later editions of the book were updated with data and information gained as a result of Mr. Annett’s visits and discussions with the engineers in various companies. It represents an excellent commentary on the state of the art at the time of the edition’s publication. Since elevators seldom wear out, much of the equipment described in Electric Elevators is still in everyday use
- **Historically notable are Elevators by John H. Jallings** and Electric Elevators by Fred Hymans. Elevators, originally published in 1919, describes in detail the state of the art of that era. The basis of many of the engineering principles of elevators can be found in the book Electric Elevators. Originally presented as a correspondence course by the International Textbook Company, this book has been republished and can be considered a handbook of the mechanical design of elevators
- **An American National Standard, The ASME** (American Society of Mechanical Engineers) Safety Code for Elevators and Escalators, A17.1-2007/CSA B44 and The Inspector’s Guide, A17.2 are published by the American

Society of Mechanical Engineers (ASME), 3 Park Avenue, New York, N.Y. 10016, and available both from ASME and from Elevator World Magazine. The A17.1 elevator code has been in continuous publication since 1922 and has served in an advisory capacity as a model for elevator safety standards throughout the world. It is updated every three years, and supplements are issued yearly. Each edition includes revisions to reflect the state of the art or clarification of previous rules.

- **Emile van der Starre** said Why should you consider having a lift on board a superyacht?

It all depends on the size of the yacht of course, but a so-called dumbwaiter or galley lift on a superyacht is indispensable. Imagine having guests over and the crew is preparing a lovely dinner in the galley, you do not want the crew to have to walk with plates of hot food through the ship any more than necessary. Not only is the food likely to be cold once it reaches the table, but there is also a chance of spilling the food. Transport with a dumbwaiter also diminishes unwanted food odours in the ship.

- **Pedestrian Planning and Design, by Dr. John J. Fruin**, Metropolitan Association of Urban Designers and Environmental Planners, 1971. Republished by Elevator World Magazine, and currently available. This volume is considered a vital reference for anyone engaged in the design and layout of any facility where people must be served in any quantity—such as terminals, lobbies of buildings, exhibits, stadiums, or museums. This work is the only source known to the author wherein the area where people can walk or assemble is clearly defined in terms of how much space must be allocated related to pedestrian traffic volume. It is a source of information on how many people (and at what rate) can use stairs, corridors, revolving doors, sidewalks, subway turnstiles, gates, doors, and so on. It is an ideal companion work to The Vertical Transportation Handbook if all the aspects of pedestrian accommodation in any facility are considered.

- **Jeff Harrison said** Hydraulic lift, a process by which some plants solve the problem of water deficit in the upper soil horizons, has been the subject of many recent studies by plant ecologists. These studies show that some shrubs and trees have the ability to move water from deep in the soil profile, where water

potentials are high, to more shallow regions where water potentials are low and root transpirational demands are extreme. Evidence suggests that this phenomenon occurs mainly at night and is driven by the water potential gradient existing between the upper and lower soil horizons. As a result of this gradient, water enters the deeper tap roots, moves up the root system, and effluxes from the shallower roots into the soil. One benefit of hydraulic lift is clear—a greater supply of water in the upper soil horizons to support daytime transpiration. However, researchers propose that hydraulic lift also benefits the plant in other ways. These include increased rates of mineralization in the rhizosphere and the maintenance of fine roots that would normally desiccate during periods of drought. On a larger scale, the fact that many plants parasitize hydraulically-lifted water may have significant effects on species distributions within plant communities. Finally, with so many plants being “potential hydraulic lifters,” it is likely that hydraulic lift plays an important role in regional water balances and should be included in any model describing landscape hydrology and/or ecology.

- **David W. Stroup** said, A literature survey was conducted to explore the need and appropriate systems for protecting elevator lobbies from smoke migration. The focus is on smoke spread through elevator shafts and lobbies, building occupant and fire fighter use of elevators during fire emergencies, and computer software for evaluating elevator performance during fires. In conducting the literature review, a number of computerized library databases were examined, including some operated by the Federal government, academic institutions, and private industry. Some of the key words used in the various searches included: elevator, fire, smoke movement, smoke migration, lobby, firefighting, emergency egress, and shaft. The results of the survey are organized into the following categories: smoke movement, occupant usage, fire fighter usage, and analysis software. Finally, recommendations for areas requiring additional research are provided.

- **K. Bhaskar, B. Subbarayudu** said an escalator is a moving staircase – a conveyor transport device for carrying people between floors of a building. The device consists of a motor-driven chain of individually linked steps that move up or down on tracks, allowing the step treads to remain horizontal. Escalators are used around the world to move pedestrian traffic in places where elevators would be impractical. Principal areas of usage include department stores, shopping malls,

airports, transit systems, convention centers, hotels, arenas, stadiums, train stations (subways) and public buildings.

- **Janette S. Dill, Kim Price-Glynn and Carter Rakovski 2016**, Feminized care work occupations have traditionally paid lower wages compared to non-care work occupations when controlling for human capital. However, when men enter feminized occupations, they often experience a “glass escalator,” leading to higher wages and career mobility as compared to their female counterparts. In this study, we examine whether men experience a “wage penalty” for performing care work in today’s economy, or whether the glass escalator helps to mitigate the devaluation of care work occupations. Using data from the Survey of Income and Program Participation for the years 1996-2011, we examine the career patterns of low- and middle-skill men in health care occupations. We found that men in occupations that provide the most hands-on direct care did experience lower earnings compared to men in other occupations after controlling for demographic characteristics. However, men in more technical allied health occupations did not have significantly lower earnings, suggesting that these occupations may be part of the glass escalator for men in the health care sector. Minority men were significantly more likely than white men to be in direct care occupations, but not in frontline allied health occupations. Male direct care workers were less likely to transition to unemployment compared to men in other occupations.

- **Aulia Harris, Sugiyono Madelan and Ahmad Badawi Saluy 2021** This study aims to analyze the relationship between service quality, product quality and trust in the decision to use brand image as an intervening medium inservice providers elevator and escalator. This type of research is an explanatory research type using quantitative descriptive research methods. The sample used was 70 respondents. The data was processed using themethod Structural Equation Model-Partial Least Square. The results showed that: (1) service quality and product quality had a positive and significant effect on brand image; (2) service quality, brand image and trust have a positive and significant effect on usage decisions; (3) there is a positive and significant influence between service quality and product quality on the decision touse brand image as a mediating variable.

- **H S Kuok 1997**, that over the past 30 years, the lift and escalator industry has grown rapidly as a result of the demand for higher buildings and the changing environment. As a result of this, elevator control systems have developed from relay logic to electronic control, where the computerized diagnostic approach is widely applied. The manufacturing of these new products is attributable to the rapid development of new and advanced technology throughout the world. This paper especially highlights the lift and escalator maintenance strategy, comprising Government regulations, different lift cycles of products and parts, quality and safety assurance of maintenance works, education and training of engineers and technical workers, behaviour of users and the different methods of building management etc. These various aspects should be strengthened and subject to enforcement in the future. A strategic plan will be discussed 'in depth' in this paper.

CHAPTER 3

RESEARCH METHODOLOGY

RESEARH METHODOLOGY

Research methodology is mainly needed for the purpose of framing the research process and the designs and tools that are to be used for the project purpose. Research methodology helps to find the customer satisfaction. This time research methodology is framed for the purpose of finding the customer perception towards mobile network in Chennai.

3.1 RESEARCH DESIGN

Descriptive Research Design

Descriptive research is a study designed to depict the participants in an accurate way. More simply put, descriptive research is all about describing people who take part in the study.

3.2 SAMPLING TECHNIQUE Convenience

Sampling method

A convenience sample is one of the main types of non-probability sampling methods. A convenience sample is made up of people who are easy to reach.

The research was designed to achieve the above-mentioned objectives and the following tools were used to collect the required data.

Sampling Method

A sample is considered during research when the size of the population is very large and a set is chosen to represent the whole population, this set is called a sample is a representative of the population under study.

There are two methods of sampling i.e., probability and non-probability sampling. To carryout this project I have used non probability sampling method.

Sampling Frame

The sample frame represents the groups of respondents that were contacted during the survey it also represents the profession of the respondents that were connected for data.

Sampling Technique

To carry out this project Convenience technique has been used

3.3 SOURCES OF DATA COLLECTION

Data collection is one of the most important aspects of research. The information in tough research methodology must be accurate and relevant. The data collection method can be classified into two methods.

PRIMARY DATA

Questionnaire method has been used as a tool for a data collection in this research.

SECONDARY DATA

Secondary data means data that are already available and they refer to data which has already been collected and analyzed by someone else. The secondary data for the study was collected from book, company websites, magazines and other sources.

3.4 STRUCTURE OF QUESTIONNAIRE

Questionnaire was divided into two sections. First part was designed to know the general information about customers and the second part contained the respondent 's opinions about their network.

3.5 SAMPLE SIZE

The total sample size for the data collection for the research was 90 respondents

3.6 PERIOD OF STUDY

The duration of study is from Jan 2022 to February 2022, two months of study.

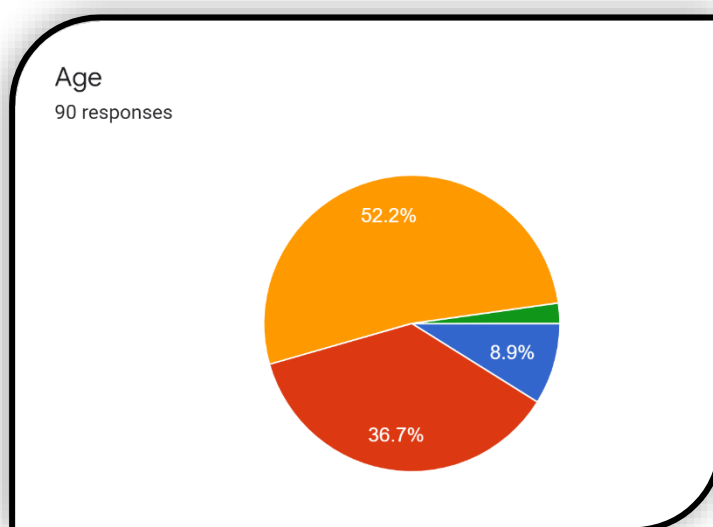
CHAPTER – 4

DATA ANALYSIS AND INTERPREATION

4.1 PERCENTAGE ANALYSIS

Table 1: Age wise classification of respondents

Age	No. of Respondents	Percentage
20-30	8	8.9%
30-40	33	36.7%
40-50	47	52.2%
50 Above	2	2.2%
TOTAL	90	100%



Interpretation:

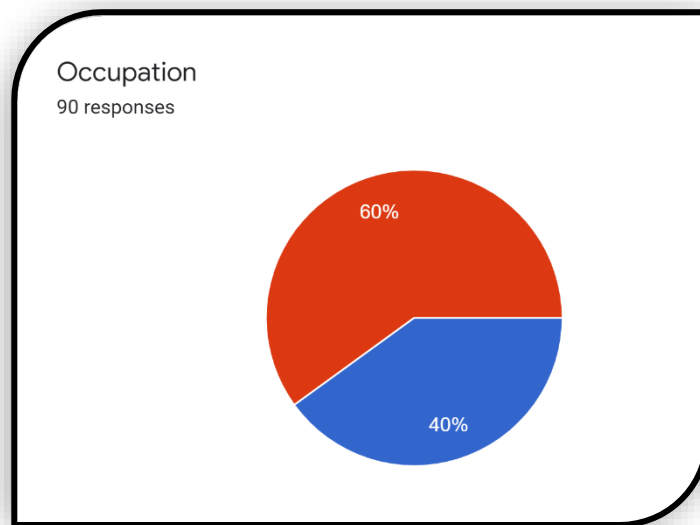
From the above table it is interpreted that 4.8% of respondents are belongs to age Category of below 20-30 years. 37.8% belongs to 30-40 years, 52.2% belongs to 40-50 And 2.2% belongs to above 50 years above.

Inference:

Majority (52.2%) of the respondents are in the age of 40-50 years

Table No 2: Occupation wise classification of respondents

Age	No. of Respondents	Percentage
Lift Operator	36	40%
Lift Mechanic	54	60
Total	90	100%



Interpretation:

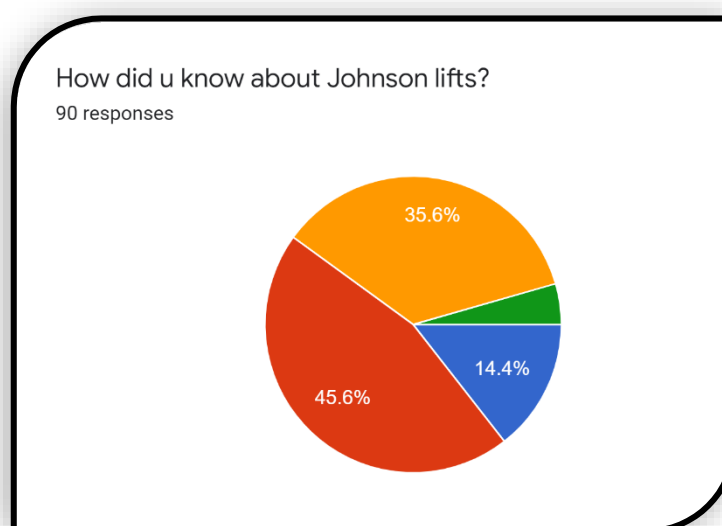
From the above table it is interpreted that 40% of respondents are belongs to Lift Operator and 60% of respondents are belong to lift Mechanic.

Inference:

Majority (60%) of the respondents are belongs to Lift Mechanic

Table 3: How did u know about Johnson lifts?

How did u know about Johnson lifts?	No. of Respondents	Percentage
Advertisement	13	14.4%
Office colleagues	41	45.6%
Friends	32	35.6%
Others	4	4.4%
Total	90	100%



Interpretation:

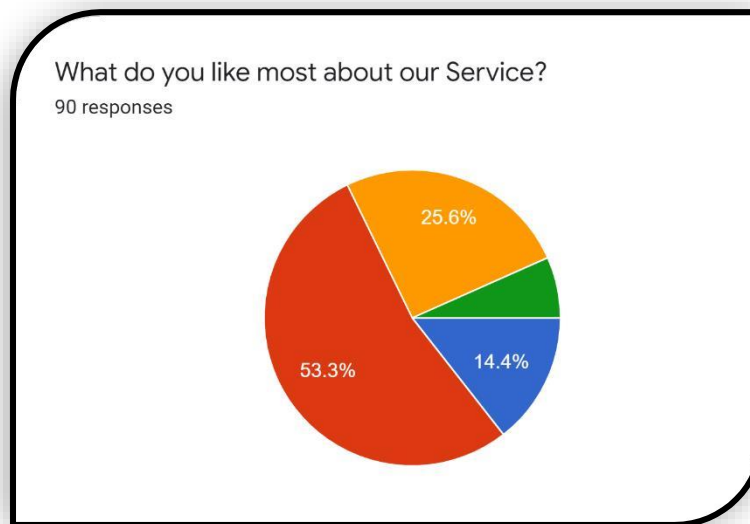
From the above table it is interpreted that 14.4% Advertisement, 45.6% Office Colleagues, 35.6% Friends and 4.4% others

Inference:

Majority (45.6%) of the respondents are office colleagues

Table 4: What do you like most about our Service?

What do you like most about our Service?	No. of Respondents	Percentage
Staff attentive	13	14.4%
Customer responsive	48	53.3%
On time delivery	23	25.6%
Work satisfaction	6	6.7%
Total	90	100%



Interpretation:

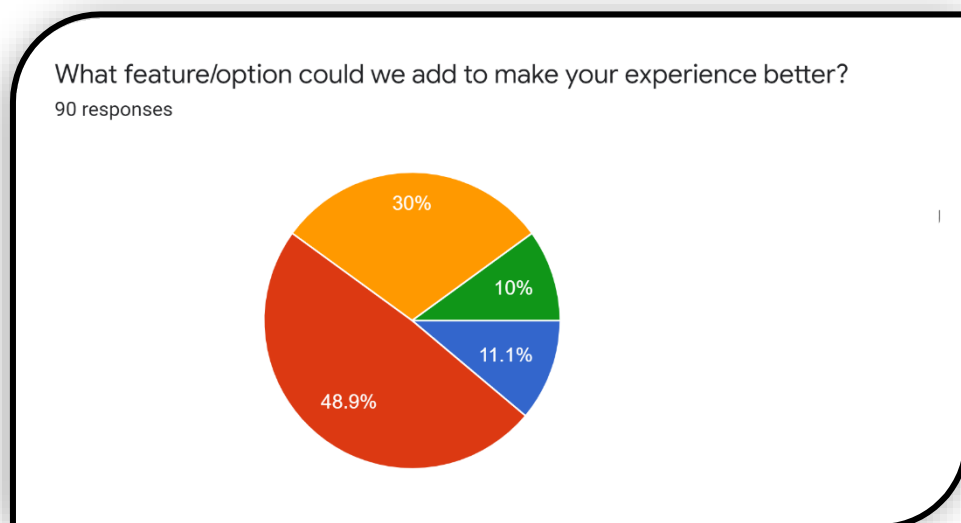
From the above table 14.4% Staff attentive, Customer responsive 53.3%, On time delivery 25.6%, Work Satisfaction.

Inference:

Majority (53.3%) of the respondents Customer responsive

Table 5: What feature/option could we add to make your experience better?

What feature/option could we add to make your experience better?	No. of Respondents	Percentage
Alexa voice	10	11.1%
Air conditioning	44	48.9%
Touch screen	27	30%
more creative	9	10%
Total	90	100%



Interpretation:

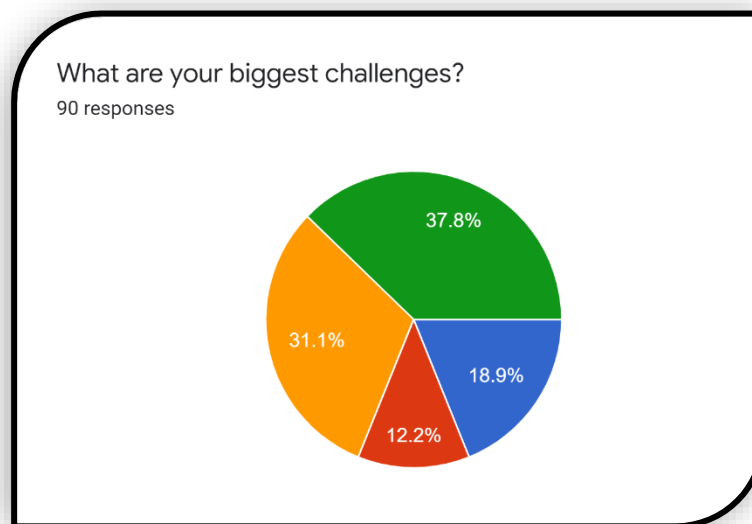
From the above table 11.1% Alexa Voice, Air conditioning 48.9%, Touch screen 30%, morecreative 10%.

Inference:

Majority (48.9%) of the respondents Air Conditioning.

Table 6: What are your biggest challenges?

What are your biggest challenges?	No. of Respondents	Percentage
Ventilation	17	18.9%
Fan is not working properly	11	12.2%
Noise	28	31.1%
load	34	37.8%
TOTAL	90	100%



Interpretation:

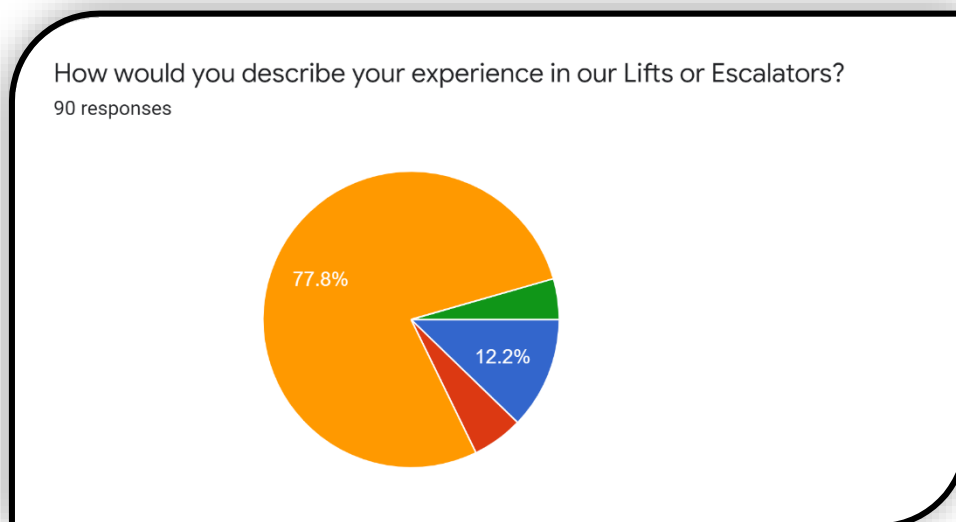
From the above table 18.9% Ventilation, 12.2% Fan is not working properly, 31.1% Noise and 37.8% Load.

Inference:

Majority (37.8%) of the respondents is Load.

Table 7: How would you describe your experience in our Lifts or Escalators?

How would you describe your experience in our Lifts or Escalators?	No. of Respondents	Percentage
Smooth going	11	12.2%
Slight slippery	5	5.6%
well designed	70	77.8%
Others	4	4.4%
TOTAL	90	100%



Interpretation:

From the above table 12.2% Smooth Going, 5.6% Slight Slippery, 77.8% Well design, 4.4% others

Inference:

Majority (77.8%) of the respondents Is Well design.

Table 8: On a scale of One (unlikely) to ten (very likely), how likely would you be to recommend us to friends or family?

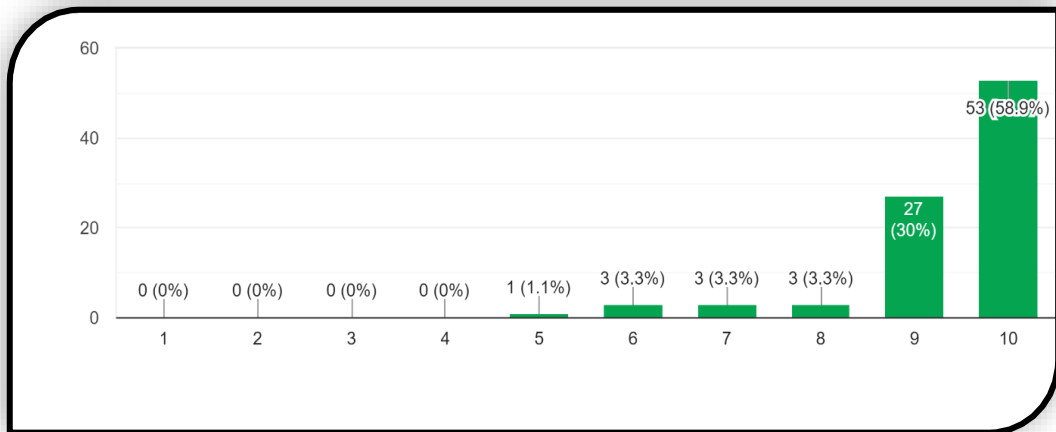
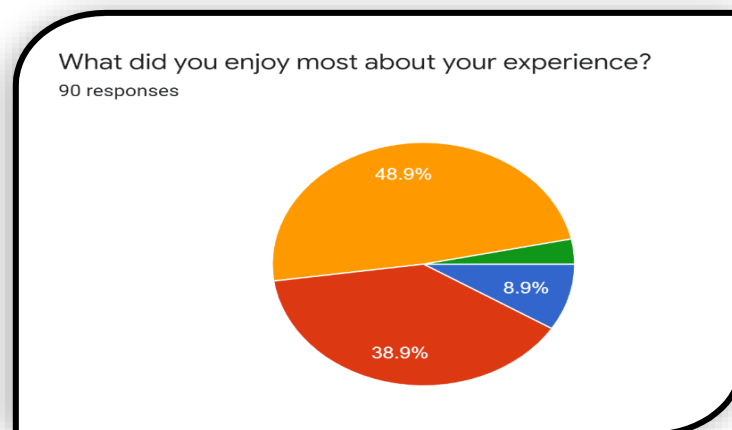


Table 9: What did you enjoy most about your experience?

What did you enjoy most about your experience?	No. of Respondents	Percentage
Smooth ride	8	8.9%
consumer friendly options	35	38.5%
less vibration	44	48.9%
others	3	3.3%
TOTAL	90	100%



Interpretation:

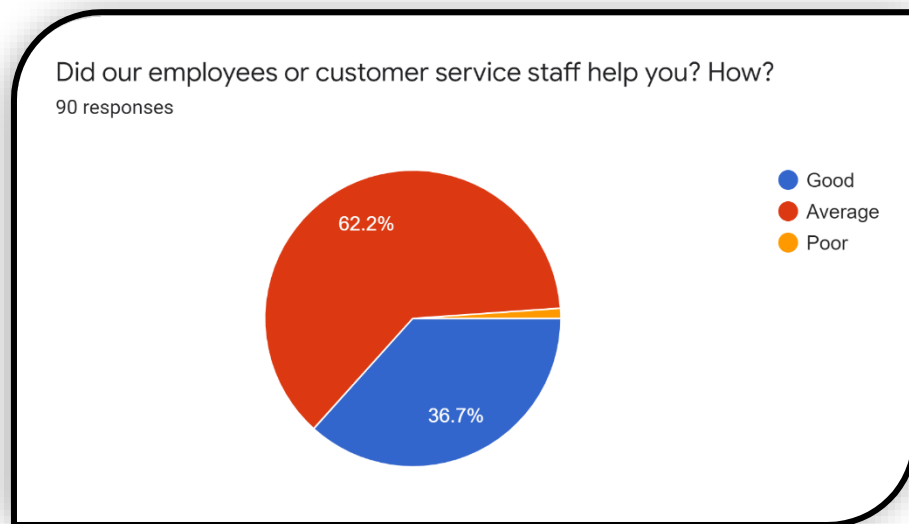
From the above table 8.9% Smooth ride, 38.5% Consumer friendly options, 9.9% Less vibration, 3.3% others

Inference:

Majority (50.5%) of the respondents Is Less Vibration.

Table 10: Did our employees or customer service staff help you? How?

Did our employees or customer service staff help you? How?	No. of Respondents	Percentage
Good	33	36.7%
Poor	1	1.1%
Average	56	62.2%
TOTAL	90	100%



Interpretation:

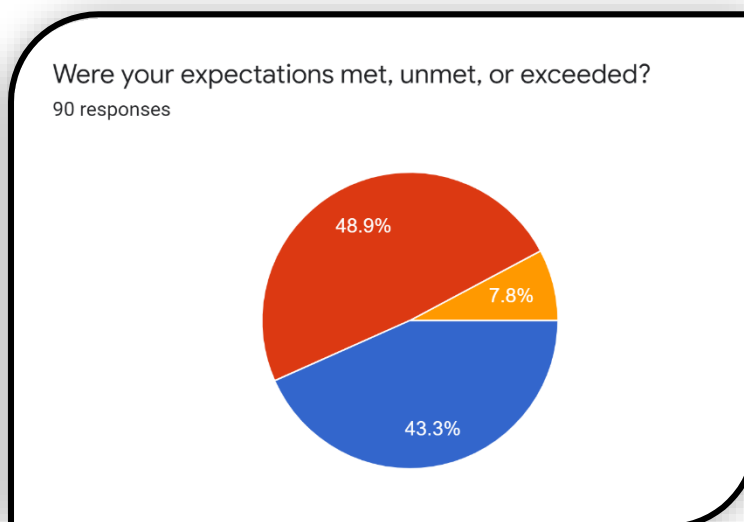
From the above table 36.7% Good, Poor 1.1%, 62.2% Average

Inference:

Majority (36.8%) of the respondents Is Good.

Table 11: Were your expectations met, unmet, or exceeded?

Were your expectations met,unmet, or exceeded?	No. of Respondents	Percentage
Met	39	43.3%
Unmet	44	48.9%
Exceed	7	7.8%
TOTAL	90	100%



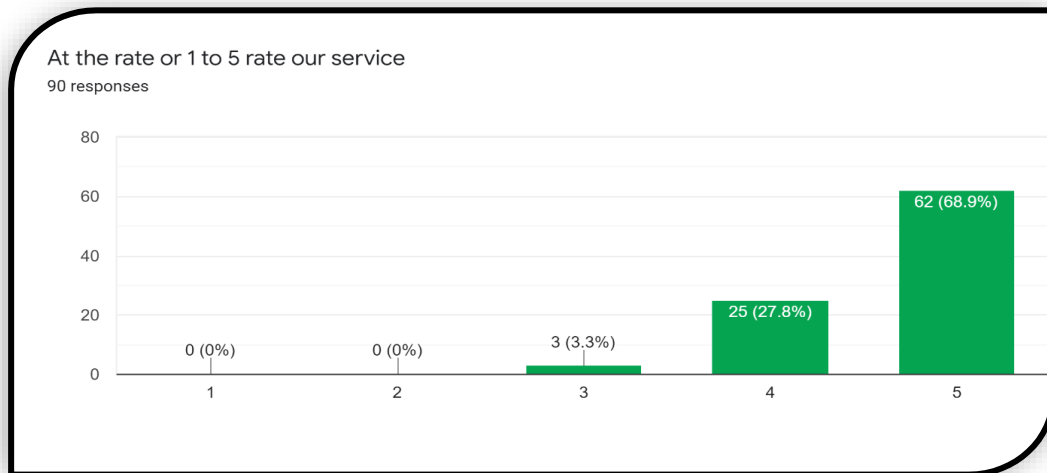
Interpretation:

From the above table 43.3% Met, 48.9% Unmet, 7.8% Exceed

Inference:

Majority (48.9%) of the respondents Is Unmet.

Table 12: Were your expectations met, unmet, or exceeded?



HYPOTHESIS TESTED TOOLS

One way

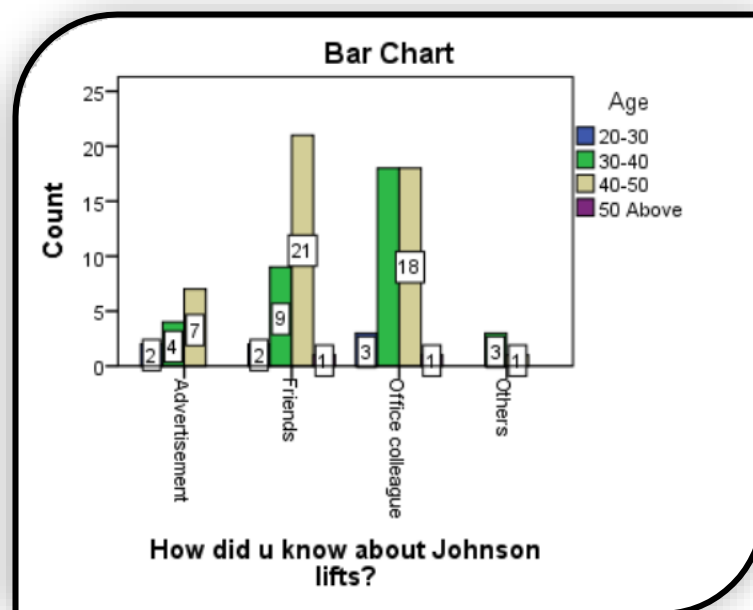
ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.958	2	2.979	2.469	.091
Within Groups	104.942	87	1.206		
Total	110.900	89			

Chi-square Test

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
How did u know about Johnson lifts * Age	90	100.0%	0	0.0%	90	100.0%

How did u know about Johnson lifts * Age Crosstabulation						
Count						
		Age				Total
		20-30	30-40	40-50	50 Above	
How did u know about Johnson lifts	Advertisement	2	4	7	0	13
	Friends	2	9	21	1	33
	Office colleague	3	18	18	1	40
	Others	0	3	1	0	4
Total		7	34	47	2	90

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.845 ^a	9	.653
Likelihood Ratio	7.173	9	.619
N of Valid Cases	90		
a. 11 cells (68.8%) have expected count less than 5. The minimum expected count is .09.			



Correlations

Correlations			
		Rate our service	Recommend us to friends or family
At the rate or 1 to 5 rate our service	Pearson Correlation	1	.186
	Sig. (2-tailed)		.079
	N	90	90
Recommend us to friends or family	Pearson Correlation	.186	1
	Sig. (2-tailed)	.079	
	N	90	90

Nonparametric Correlations

Correlations				
			Rate our service	Recommend us to friends or family
Spearman's rho	Rate our service	Correlation Coefficient	1.000	.258
		Sig. (2-tailed)	.	.014
		N	90	90
	Recommend us to friends or family	Correlation Coefficient	.258	1.000
		Sig. (2-tailed)	.014	.
		N	90	90

Regression

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.228 ^a	.046	.035	.924
a. Predictors: (Constant), Staffs help				

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.927	1	3.917	4.204	.039 ^b
	Residual	78.473	89	.892		
	Total	82.400	90			
a. Dependent Variable: Age						
b. Predictors: (Constant), Staffs Help						

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.388	.220		6.308	.000
	Staffs Help	.183	.087	.218	2.098	.039
a. Dependent Variable: Age						

CHAPTER 5

FINDINGS, SUGGESTIONS AND CONCLUSION

- ❖ Majority (52.2%) of the respondents are in the age of 40-50 years
- ❖ Majority (60%) of the respondents are belongs to Lift Mechanic
- ❖ Majority (45.6%) of the respondents are office colleagues
- ❖ Majority (53.3%) of the respondents Customer responsive
- ❖ Majority (48.9%) of the respondents Air Conditioning.
- ❖ Majority (37.8%) of the respondents Is Load.
- ❖ Majority (77.8%) of the respondents Is Well design.
- ❖ Majority (50.5%) of the respondents Is Less Vibration.
- ❖ Majority (36.8%) of the respondents Is Good.
- ❖ Majority (48.9%) of the respondents Is Unmet.

SUGGESTIONS

Johnson lifts and Escalators should concentrate on building around the iconic status it already enjoys if it plans to attract customers migrating to other manufacturers. The Company employees need further training on manage high profile customers. Training in the areas of attitude, sales can be provided to make them more successful.

CONCLUSION

The A STUDY ON AFTER SALE ON JOHNSON LIFTS AND ESCALATORS the results of path analysis show that there is influence of Lifts performance and after sale service on users' perception. It is also found that there is influence of Lifts and Escalator performance, after sale service of Johnson lifts and escalators. The findings also highlighted that employee consciousness does not influence on after sale service. Hence, it is concluded that Company employees need further training on manage high profile customers. Training in the areas of attitude, sales can be provided to make them more successful.

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APPENDIX – I (Questionnaire)

After-Sale Service in Johnson lifts and escalators

Johnson lifts and escalators

1. Name

2. Age

Mark only one oval.

☐ 20-30

☐ 30-40

☐ 40-50

☐ 50 Above

3. Occupation

Mark only one oval.

☐ Lift operator

☐ Lift Mechanic

4. How did u know about Johnson lifts?

Mark only one oval.

☐ Advertisement

☐ Office colleague

☐ Friends

☐ Others

5. What do you like most about our Service?

Mark only one oval.

- ☐ staff attentive
- ☐ costomer responsive
- ☐ on time delivery
- ☐ work satisfaction

6. What feature/option could we add to make your experience better?

Mark only one oval.

- ☐ Alexa voice
- ☐ Air conditioning
- ☐ Touch screen
- ☐ more creative

7. What are your biggest challenges?

Mark only one oval.

- ☐ Ventilation
- ☐ Fan is not working properly
- ☐ Noise
- ☐ load

8. How would you describe your experience in our Lifts or Escalators?

Mark only one oval.

- ☐ Smooth going
- ☐ Slight slippery
- ☐ well designed
- ☐ Others

9. On a scale of One (unlikely) to ten (very likely), how likely would you be to recommend us to friends or family?

Mark only one oval.

1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

10. What did you enjoy most about your experience?

Mark only one oval.

- ☐ Smooth ride
- ☐ consumer friendly options
- ☐ less vibration
- ☐ others

11. Did our employees or customer service staff help you? How?

Mark only one oval.

- ☐ Good
- ☐ Average
- ☐ Poor

12. Were your expectations met, unmet, or exceeded?

Mark only one oval.

- ☐ Met
☐ Unmet
☐ Exceeded

13. At the rate or 1 to 5 rate our service

Mark only one oval.

1	2	3	4	5
☐	☐	☐	☐	☐

ANNEXURE 2- ARTICLE

A STUDY ON AFTER-SALE SERVICE IN JOHNSON LIFTS AND ESCALATORS

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ABSTRACT:

Johnson is India's largest and leading lifts and Escalator Manufacturing Company with major market share in the Vertical Transportation needs of India's Infrastructure Industry

I. INTRODUCTION

Johnson is India's largest and leading lifts and Escalator Manufacturing Company with major market share in the Vertical Transportation needs of India's Infrastructure Industry. Founded in 1963 and headquartered at Chennai with 3 factories at Chennai and 1 at Nagpur and its operations spread across Pan India through 54 branches has shown its excellence in manufacturing in terms of Infrastructure, Production Capacity, R&D Capability, Quality & Reliability of Products, Timely Delivery-Installation, Service network and Modernization.

II REVIEW OF LITERATURE

Johnson Lifts, a Manufacturer of lifts and escalators, has come out with an innovation that enable users to operate lifts without touching the buttons. It is the second company to do so after Kone Elevator India, that introduced a mobile app last week. "Our design and development team has developed a smartphone app EyeRIS that allow users to have a contactless lift usage experience, Crucial in these times when COVID-19 is forcing us to look at our lives differently," said the firms **ED V. Jagannathan**.

Electric Elevators, by **Fred A. Annett**, originally published by McGraw-Hill, New York, 1960, and republished by Elevator World Magazine. This book was one of the first efforts to compile a volume on the many aspects of elevators, especially from a

technical standpoint. Mr. Annett was an editor of Power Magazine during the 1950s and 1960s, and the first edition of Electric Elevators was a compilation of various articles published in that magazine. Later editions of the book were updated with data and information gained as a result of Mr. Annett's visits and discussions with the engineers in various companies. It represents an excellent commentary on the state of the art at the time of the edition's publication. Since elevators seldom wear out, much of the equipment described in Electric Elevators is still in everyday use

Historically notable are Elevators by John H. Jallings and Electric Elevators by Fred Hymans. Elevators, originally published in 1919, describes in detail the state of the art of that era. The basis of many of the engineering principles of elevators can be found in the book Electric Elevators. Originally presented as a correspondence course by the International Textbook Company, this book has been republished and can be considered a handbook of the mechanical design of elevators

An American National Standard, The ASME (American Society of Mechanical Engineers) Safety Code for Elevators and Escalators, A17.1-2007/CSA B44 and The Inspector's Guide, A17.2 are published by the American Society of Mechanical Engineers (ASME), 3 Park Avenue, New York, N.Y. 10016, and available both from ASME and from Elevator World Magazine. The A17.1 elevator code has been in continuous publication since 1922 and has served in an advisory capacity as a model for elevator safety standards throughout the world. It is updated every three

years, and supplements are issued yearly. Each edition includes revisions to reflect the state of the art or clarification of previous rules.

III.INDUSTRY PROFILE

JOHNSON LIFTS, manufacturers of lifts and escalators, based at Chennai are the market leaders in the Lift industry and they have multi factories and operations across pan India and Overseas. This leading and most popular brand leads the market as no.1 in sales turn over, over a decade against all renowned MNC'S. **JOHNSON LIFTS** is truly MADE IN INDIA Company established in 1963, and has been growing consistently year on year. Lift industry has been constantly growing with the urbanization and the consistent growth and expansion in tier 1 & 2 cities creating opportunities for housing, malls & commercial complexes.

Along with it the growth in the public infrastructure systems like the modernization of airports, railway stations, metro line connectivities and foot over bridges in junctions has been pushing the industry to expand their manufacturing facilities and moreover created opportunities for technical man power increasing year on year. Since the lifts and escalators are technical products needing high level of periodical service and maintenance, trained & skilled man power in sufficient quantity has been a yearly requirement. Keeping this requirement in mind and to generate regular skilled man power for the industry and **JOHNSON LIFTS** being pioneer in this field with its social responsibility envisaged to develop a skill manpower pool through intensive engineering training by nurturing and molding students during the curriculum thereby build a career for individuals.

IV. OBJECTIVES

PRIMARY OBJECTIVE:

To Study after-sale service in Johnson lifts and escalators.

SECONDARY OBJECTIVE:

- To Study about Employees or customer service staff Service.
- To Study about like most about our Service.
- Value added service
- Satisfaction of service

V. NEED FOR THE STUDY

The study helps in knowing the awareness and satisfaction and also the perception of consumers towards **JOHNSON LIFTS**. It also helps to analyse the dealer's attitude towards the service and benefits rendered by the company. This study also helps the graduates and the researchers who would like to increase their knowledge on the subject which might be of help in the future while looking for works.

VI. SCOPE OF THE STUDY

The scope of the study is to find out the After-Sale service in Johnson Lifts and Escalators. The study covers the different aspects of Sale Services.

IV. RESEARCH METHODOLOGY

As the problem is well known which focuses on procurement of in-depth knowledge and the facts will be used to analyse and evaluate the data. So, the research would be descriptive as well as analytical in nature.

SOURCES OF DATA:

Primary data-

Questionnaire given with 85 respondents.

Secondary data-

Websites and online journals, Published reports and review of literature from published article.

STRUCTURE OF QUESTIONNAIRE:

Questionnaire was divided into two sections.

First part was designed to know general information about respondents and the second part contained the respondents opinion about Lifts and Escalators

Basic introduction Personal details

Research related question Perception questions Likert scaling Questions

Suggestions question Sample size: 85

Period of study – 1 month

Location and targeted people of study:

Chennai and young employees

IV. HYPOTHESIS

HYPOTHESIS H1

Null hypothesis (H0): There is no significant relationship between Financial literacy and variables financial behaviour, financial attitude and financial knowledge.

Alternate hypothesis(H1): There is significant relationship between financial literacy and variables financial behaviour, financial attitude and financial knowledge.

HYPOTHESIS H2:

Null hypothesis(H0): There is no significant relationship between demographic characteristics and financial literacy
 Alternate hypothesis(H2): There is significant relationship between demographic characteristics and financial literacy.

Chi-square test

A chi-square test is a hypothesis testing method. Two common chi-square tests involve checking if observed frequencies in one or more categories match expected frequencies.

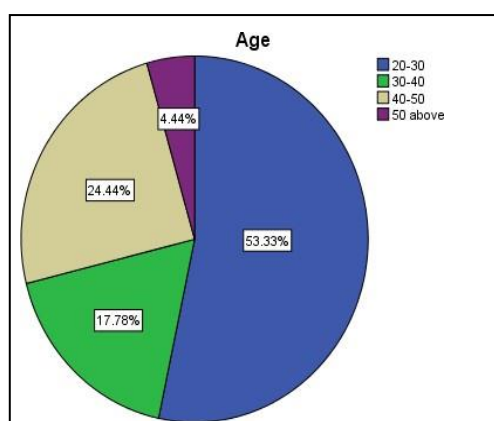
ONE WAY ANNOVA:

One way ANNOVA ("analysis of variance") compares the means of two or more independent groups in order to determine whether there is statistical population means are significantly different.

One-way ANNOVA is a parametric test.

V. DATA ANALYSIS

Age					
Age	Frequency	Percent	Valid Percent	Cumulative Percent	
20-30	48	53.3	53.3	53.3	
30-40	16	17.8	17.8	71.1	
40-50	22	24.4	24.4	95.6	
50 above	4	4.4	4.4	100.0	
Total	90	100.0	100.0		



Interpretation:

From the above table it is interpreted that 53.3% of respondents are belongs to age Category of below 20 – 30 years. 17.8%

belongs to 30-40 years, 24.4% belongs to 40-50 And 4.4% belong to 50 above.

Inference

Majority (53.3%) of the respondents are in the age of 20-30 years

Table 2

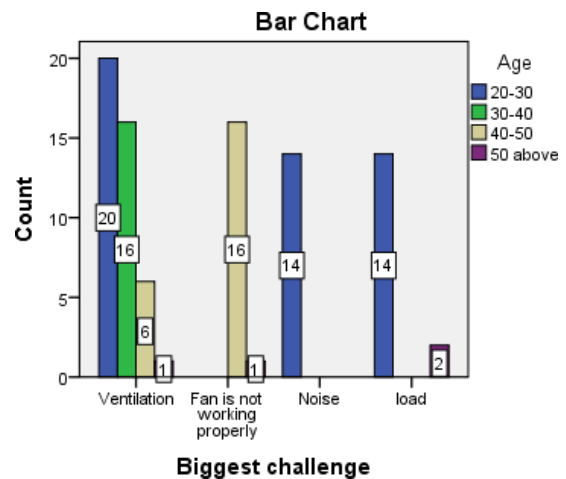
Occupation				
	Frequency	Percent	Valid Percent	Cumulative Percent
Lift operator	55	61.1	61.1	61.1
Lift Mechanic	35	38.9	38.9	100.0
Total	90	100	100.0	

How did u know about Johnson lifts?					
	Frequency	Percent	Valid Percent	Cumulative Percent	
Advertisement	41	45.6	45.6	45.6	
Office colleague	31	34.4	34.4	80.0	
Friends	8	8.9	8.9	88.9	
Others	10	11.1	11.1	100.0	
Total	90	100.0	100.0		

SPSS Tool

Biggest challenge * Age Crosstabulation						
Count						
		Age				Total
		20 - 30	30 - 40	40 - 50	50 above	
Biggest challenge	Ventilation	20	16	6	1	43
	Fan is not working properly	0	0	16	1	17
	Noise	14	0	0	0	14
	load	14	0	0	2	16
Total		48	16	22	4	90

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	82.650 ^a	9	.000
Likelihood Ratio	89.438	9	.000
Linear-by-Linear Association	4.091	1	.043
N of Valid Cases	90		
a. 10 cells (62.5%) have expected count less than 5. The minimum expected count is .62.			



ANOVA					
Like about service					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	18.108	3	6.036	7.220	.000
Within Groups	71.892	86	.836		
Total	90.000	89			

Correlations			
		Features missing	Age
Features missing	Pearson Correlation	1	-.428*
	Sig. (2-tailed)		.000
	N	90	90
Age	Pearson Correlation	-.428**	1
	Sig. (2-tailed)	.000	
	N	90	90
**. Correlation is significant at the 0.01 level (2-tailed).			

Correlations				
			Features missing	Age
Spearman's rho	Features missing	Correlation Coefficient	1.000	-.486**
		Sig. (2-tailed)	.000	.000
		N	90	90
	Age	Correlation Coefficient	-.486**	1.000
		Sig. (2-tailed)	.000	.000
		N	90	90

** . Correlation is significant at the 0.01 level (2-tailed).

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.218 ^a	.048		

a. Predictors: (Constant), Recoment to friends

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.927	1	3.927	4.404	.0396
	Residual	78.473	88	.892		
	Total	82.400	89			

a. Dependent Variable: Age

b. Predictors: (Constant), Recoment to friends

Coefficients ^a						
Model		Unstandardiz ed Coefficients		Stand ardized Coeffi cients	t	Sig .
		B	Std. Error	Beta		
1	(Con stan t)	1.388	.220		6.3 08	.00 0
	Rec om m end to frien ds	.183	.087	.218	2.0 98	.03 9

a. Dependent Variable: Age

CONCLUSION

The A STUDY ON AFTER SALE ON JOHNSON LIFTS AND ESCALATORS the results of path analysis show that there is influence of Lifts performance and after sale service on users' perception. It is also found that there is influence of Lifts and Escalator performance, after sale service of Johnson lifts and escalators. The findings also highlighted that employee consciousness does not influence on after sale service. Hence, it is concluded that Company employees need further training on manage high profile customers. Training in the areas of attitude, sales can be provided to make them more successful.

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