

CHAPTER - IV

RESEARCH METHODOLOGY AND DESCRIPTIVE STATISTICS

4.1 INTRODUCTION

Research in common parlance refers to a search for knowledge. We all possess the vital instinct of inquisitiveness for, when the unknown confronts us, we wonder and our inquisitiveness makes us probe and attain full understanding of the unknown, This inquisitiveness is the mother of all knowledge and the method which one employs for obtaining the knowledge of whatever the unknown , can be termed as research.

As the term research refers to the systematic method consisting of:

- Enunciating the problem,
- Formulating the hypothesis,
- Electing a research technique,
- Collecting the facts or data,
- Analysing the facts and
- Reaching certain conclusions either in the form of solutions towards the concerned problem or in certain generalisations for some theoretical formulation.

4.2 THE RESEARCH DESIGN

The Research Design can be conveniently categorised as:

Exploratory Research Study and Descriptive Research Study

Exploratory Research Study: The major emphasis in such studies is on the discovery of ideas and insights. As such the method adopted for this is survey of concerning literature.

Descriptive Research Study: Descriptive research studies are those studies which are concerned with describing the characteristics of a particular

individual or of a group. The research method adopted here is survey using a structured questionnaire, interview and literature review.

Careful selection of respondents is done, because the nature of the survey is on gaining insight into the relationship between variables.

Provocative ideas and useful insights are very important. This type of research will involve intensive study of selected respondents of a phenomenon. This is a qualitative study using phenomenological interviews. The participants are entrepreneurs running businesses or employees in leadership positions in Pune.

Selected participants are either professional practitioners (doctors, lawyers, architect), or running small businesses mostly in the cellular phone industry, information technology services, clothing retail industry etc. with less than 100 employees. Many of these businesses are housed in complexes. Some respondents are owners of medium size businesses with 100 – 500 employees or owners of large businesses with more than 500 employees. Their businesses are housed in MIDC, independent towers or have corporate offices in the city region where they were interviewed.

4.3 POPULATION

The telephone or email contacts of respondents are sought. Once they are received the researcher contacted the respondents by phone or email. If a prospective interviewee declined to participate, the researcher thanked the person and moved on to the next person on the list. This procedure will continue until 40 entrepreneurs and 60 non entrepreneurs were interviewed.

For every willing and qualified participant consent to audio tape the interview was sought from the participants. Participants were also asked to provide a convenient telephone contact for any follow up interview. Any participant who would like to obtain a copy of the research findings will also be asked to provide mailing address. After the study is complete the research summary was be emailed to them.

4.4 RESEARCH STAGES

Attention is focussed on

Formulating of the objectives of the study

1. Designing the method of data collection
2. Selecting the sample
3. Collecting the data
4. Processing and Analyzing the data
5. Reports and findings

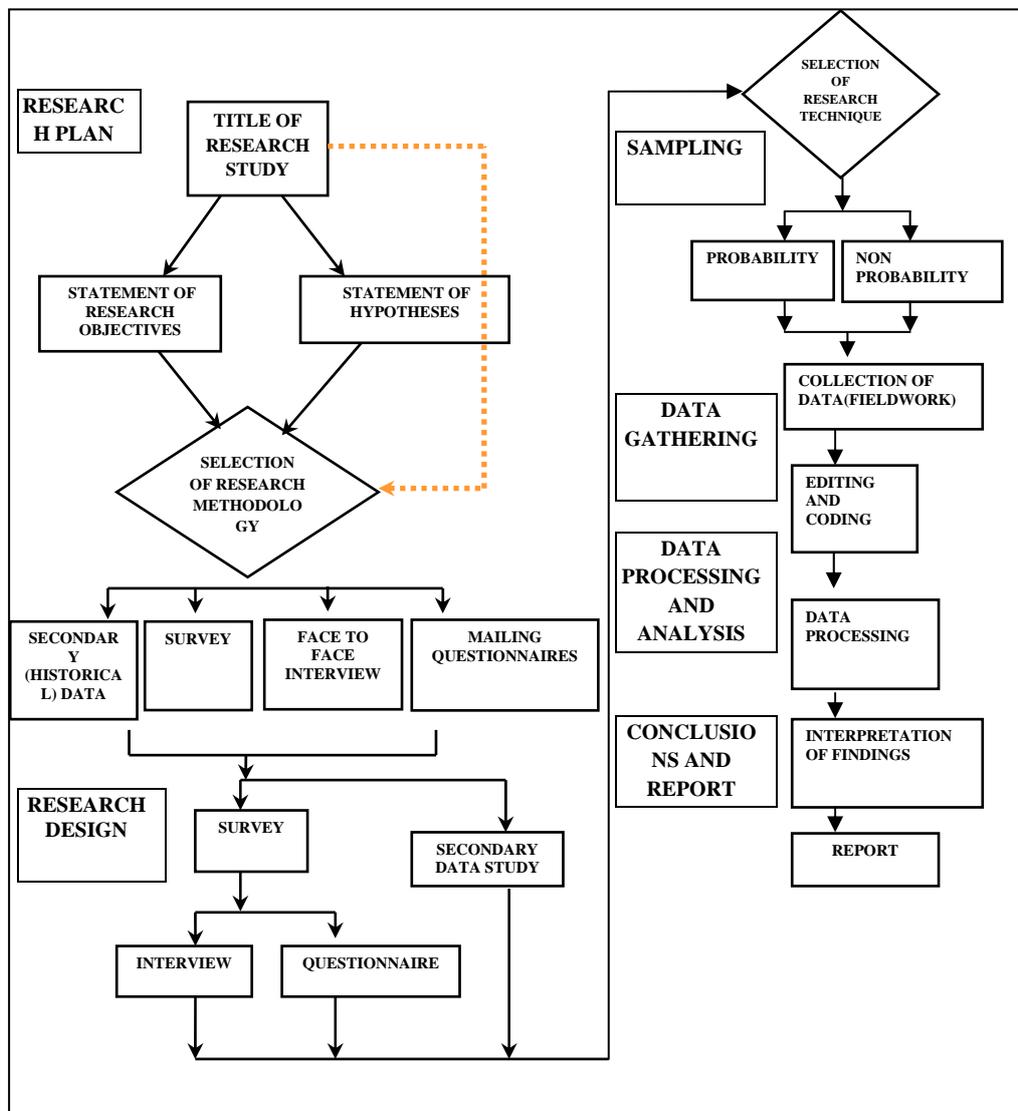


Figure 4.1: Research Design- Flow Chart

4.5 SOURCES OF DATA COLLECTION

Data, which is a vital aspect in any research, will be collected through various sources. The researcher used primary as well as secondary data for this study.

PRIMARY DATA: The primary data was obtained by administering a questionnaire either by mail or personally to the respondents to elicit information on various issues relating to the entrepreneurial competencies required for the success of the enterprises and also by conducting face-to-face structured depth interviews with a sample of entrepreneurs and people who have knowledge of the topic being investigated.

SECONDARY DATA: It will be collected by examining existing data from following sources:

- Research journals,
- Business literature,
- Business Magazines,
- Internet,
- Newspapers,
- Conference Proceedings,
- Doctoral dissertations,
- Government publications,

Focus is on seeking explanations, and requires the integration of many diverse bits of information into a unified interpretation.

THE FIELDWORK

In the qualitative part of the study, the purpose is to understand how competencies that influence entrepreneurial success.

The respondents were identified from the national database of individuals who had started companies or were co-founders available on these sites.

4.6 SAMPLING

Sampling refers to the process of choosing a sample of elements from a total population of elements.

Probability vs. Non-Probability Sampling

Statisticians distinguish between two broad categories of sampling.

- **Probability sampling.** With probability sampling, every element of the population has a known probability of being included in the sample.
- **Non-probability sampling.** With non-probability sampling, we cannot specify the probability that each element will be included in the sample.

Though initially care was taken that a respondent from each sector business would represent the sample it was not possible to get 2 each from all 50 identified sectors and majority of the respondents were either employed or running business in IT sector.

JUSTIFICATION OF SAMPLING METHOD: The method thereby applied was Non- probability & Simple random sampling since the appointments sought were according to the convenience of respondents from the busy schedule and was majorly possible if there was some reference for the same. Since the researcher is a faculty in a management institute most of the contacts were from colleagues, students and while attending or organizing events.

Table 4.1 Sample design

SAMPLE	Entrepreneurs and Intrapreneurs
SAMPLE SIZE	100
SAMPLE FRAME	Pune
SAMPLING METHOD	Non-probability Simple Random Sampling
CONSTRAINTS	Number of Respondents
DATA	Primary & Secondary Data
RESEARCH DESIGN	Exploratory& Descriptive Research Design.
TYPE OF QUESTIONNAIRE	Close Ended

CLASSES OF RESPONDENTS TO BE CONTACTED

For the success of entrepreneurs the economic environment plays a vital role and hence entrepreneurs, employees in leadership position, bureaucrats, senior citizens, educationalists and those who are associated with the topic under study were also included in the study.

SAMPLE SELECTION:

To study the competencies of the entrepreneurs/intrapreneurs in Pune face to face structured interviews were taken to extract information about them by carefully selected group of questions. The sample had knowledge and experience of the topic being investigated.

UNIVERSE AND SAMPLE SIZE: The survey system ignores the population size since it is large. Hence a sample size of 100 respondents was selected to represent the population which were comprised of entrepreneurs and non-entrepreneurs.

4.7 INTERVIEW PROTOCOL

1. Please give me a brief history of your life touching on your family and education
2. Please describe your college/university life, your experiences in and out of class and your personal growth in the course of your studies.
3. Please describe your business and tell me where you see it going in the next five years.
4. Were there any experiences in college/university that influenced your decision to start your own business?
5. Which people influenced your decision to start your own business?
6. Thinking about your own experiences and people that you knew in college, are there some things you believe colleges/universities could do to encourage and prepare students for self-employment rather than salaried employment?

The Questions were followed with Probes of the following nature and a questionnaire

1. Could you please expound....

2. Please clarify.....
3. That is interesting could you?
4. Please go back to.....
5. What did you do about.....?
6. Can you tell me what happened during.....?
7. What was your reaction to?
8. Why is that?
9. How did that happen?

4.8 INSTRUMENTS

Questionnaire

Competency context questions

1. Visionary

Question 13. I take pleasure in responding to challenges

Question 22. I would like to be employed as I feel that my boss can tell me what I should be doing.

Question 28. I do not mind routine challenging work if the pay is good

Question 32. When I do something I see to it that it is not only done but one with excellence.

Question 38. I would rather hire people on the basis of relations rather than on their competence.

2. High powered

Question 24. I enjoy working in unstructured situations and face challenges

Question 34. It bothers me when given overlapping responsibilities (R)

Question 37. I can't wait and watch things happen, I prefer to make things happen

Question 40. I can think of many times when I persisted with work when others quit

Question 42. I believe success is a matter of luck and fate rather than the personal efforts.

3. Leadership

Question 17. I accomplish most when I single handedly direct a team

Question 19. I have confidence in my ability to lead a team

Question 41. In unclear situations I like to take a lead and make decisions

Question 25. I have weaknesses and fears of being held responsible for the task of others.

Question 35. I find difficulty in asserting myself against a decision of a majority.

4. Risk taking

Question 23. I do not mind working under uncertainty as long as there is possibility of future gains.

Question 29. I do not fear investing my money on a venture whose dividends I have calculated.

Question 33. I will consider taking a risk if the success rate will be 60% or more.

Question 39. I fear venturing into or moving into a new undertaking I know nothing about.

Question 16. Job security is extremely important to me.

5. Innovation

Question 18. I avoid changing the way things are done.

Question 20. While others see nothing unusual in ideas I see opportunities for business.

Question 30. I believe there are always new and better ways of doing things.

Question 26. I am good at finding money and people to start a new organization or new program.

Question 36. I find it difficult to come with new, creative or even innovative ideas.

6. Internal Locus of control

Question 14. People's misfortunes result from the mistakes they make.

Question 21. I look forward to returning to work when I am away from work.

Question 27. I love work.

Question 31. It is not luck nor fate that influence the events of my life.

Question 15. I do not care even if the profit is small but I will work harder so that it is assured and constant.

4.9 DESCRIPTIVE STATISTICS

Table 4.2 summarizes the measurement model latent variables, number of measurement items, measurement description and format,

Table 4.2 Measurement Model

Latent variable	Indicators
Business success	One 5-point scales
Visionary	Five 5-point scales
Leadership	Five 5-point scales
Innovativeness	Five 5-point scales
Risk taker	Five 5-point scales
High powered	Five 5-point scales
Internal locus of control	Five 5-point scales
Business background	1 yes or no question and 1 string question
Age	4 MCQ
Gender	1 M/F question
Community	10 MCQs

A total of 122 responses to the survey were achieved of which 100 respondents had completed the entire survey. The 22 respondents who did not complete the entire survey were dropped from the data set to maintain accuracy in the data analysis and tests. Following are the findings of the data analysis for the 100 respondents to the survey.

The following are complete descriptive statistics of all the 100 respondents to the survey.

4.9.1 Age

The majority of the **respondents** (57%) were between “26 and 39” years of age, with the lowest percentage (13%) falling with the age group “below 25 years”.

There could be a good question for future research to find whether the inclination to get into business was affected by the age of the person

Table 4.3: Age of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Below 25	13	13	13	13
26-39	57	57	57	70
40-54	16	16	16	86
Above 55	14	14	14	100
Total	100	100	100	

Age of respondents

■ Valid below 25 ■ Valid 25-39 ■ Valid 40-54 ■ Valid above 55 ■ Valid Total

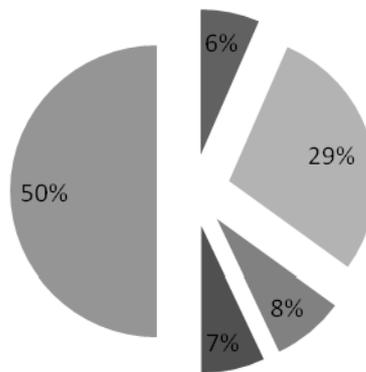


Figure 4.2: Age of respondents

4.9.2 Gender

The majority of respondents i.e. 87% were male and 17% female.

Having identified the respondents for being entrepreneurs or holding responsible position the reason for the majority of the respondents being male may be because in India the percentage of male members in the workforce is also more as compared to their female counterparts and it increases in the leadership positions.

This shows women starting their own business are yet lesser as compared to those getting employed.

Table 4.4: Gender of respondents

Gender				
	Frequency	Percent	Valid Percent	Cumulative Percent
Male	87	87	87	87
Female	13	13	13	100
Total	100	100	100	

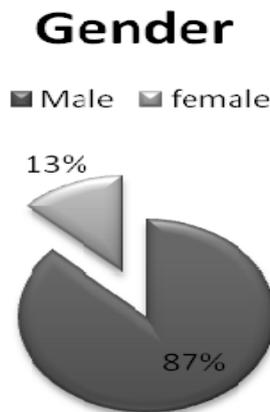


Figure 4.3: Gender of respondents

4.9.3 Employment status (Entrepreneur/employee)

Among the respondents 60% were “employed” within a business they did not “own” or “co-own” and the 40% (i.e.11 “co-owned” +29 “owned”) a business.

This provided a good representation from each population group for the survey.

Table 4.5: Employment status

Employment status				
	Frequency	Percent	Valid Percent	Cumulative Percent
Employee	60	60	60	60
Co-owner	11	11	11	71
Owner	29	29	29	100

Employment status

■ employee ■ co-owner ■ owner

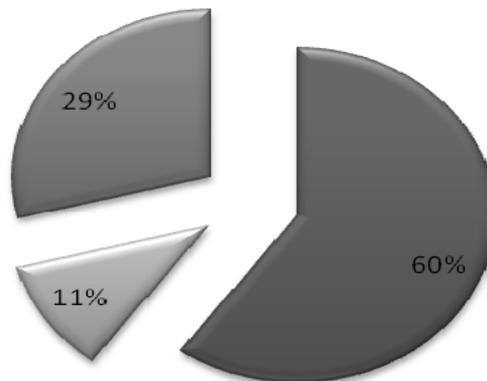


Figure 4.4: Employment status

4.9.4 Nature of business / Business size

Majority of the respondents (i.e. 37%) worked for small businesses of “less than 100 employees” and the least number of respondents were “professional practitioners” viz.; doctor, lawyer or architect (i.e. 10%). The reason being due to convenience sampling the researcher could take appointments from those engaged in working for small enterprises.

Table 4.6: Nature of business/ Business size

Nature Of Business				
	Frequency	Percent	Valid Percent	Cumulative Percent
Professional Practice	10	10	10	10
Small Business	37	37	37	47
Medium Business	22	22	22	69
Large Business	30	30	30	99
Invalid	1	1	1	100
Total	100	100	100	

Nature of business/Business size

■ professional practice ■ small business ■ medium business ■ large business

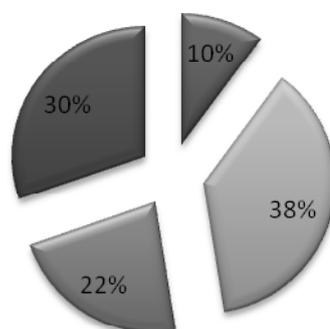


Figure 4.5: Nature of business / Business size

4.9.5 Length of Service

The total experience of majority i.e. 63 % of the respondents was “less than 10 years” and 37% of them had an experience of “more than 10 years”.

Table 4.7: Length of service

Length of Service				
	Frequency	Percent	Valid Percent	Cumulative Percent
Less than one year	14	14	14	14
Less than 10 years	49	49	49	63
More than 10 years	37	37	37	100
Total	100	100	100	

Length of service

■ less than one year ■ less than 10 years ■ more than 10 years

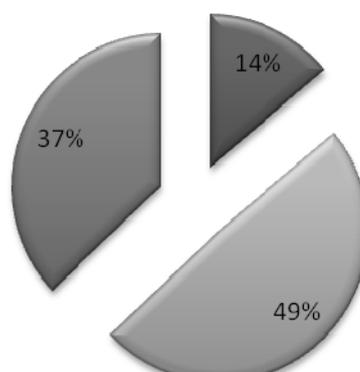


Figure 4.6: Length of service

4.9.6 Entrepreneur in family /Business background

Of the total sample size only 48% said they have a **family member as an entrepreneur** and 52% said that they didn't have anyone in the **family as an entrepreneur**.

An interesting statistic of the sample population is that out of the 60 employees 28 i.e. 43% **have business background** and 57% did not.

Out of the 40 entrepreneurs 20 i.e. 50% have business background and 20 i.e. 50% **did not have a business background**.

Table: 4.8 Entrepreneur in family

Was any of the member of your family or relation an entrepreneur?				
	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	48	48	48	48
No	52	52	52	100
Total	100	100	100	

Was any of the member of your family or relation an entrepreneur?

■ yes ■ no

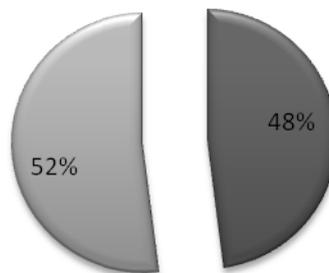


Figure 4.7 Number of respondents having entrepreneur in family

4.9.7 Success status of business

80% of the respondents were “**successful**” 2% unsuccessful and 18% chose to be neutral to the question.

Table: 4.9 Success status of the companies where the respondents work

Success Status Of Business				
	Frequency	Percent	Valid Percent	Cumulative Percent
Unsuccessful	2	2	2	2
Neutral	18	18	18	20
Successful	45	45	45	65
Very Successful	35	35	35	100
Total	100	100	100	

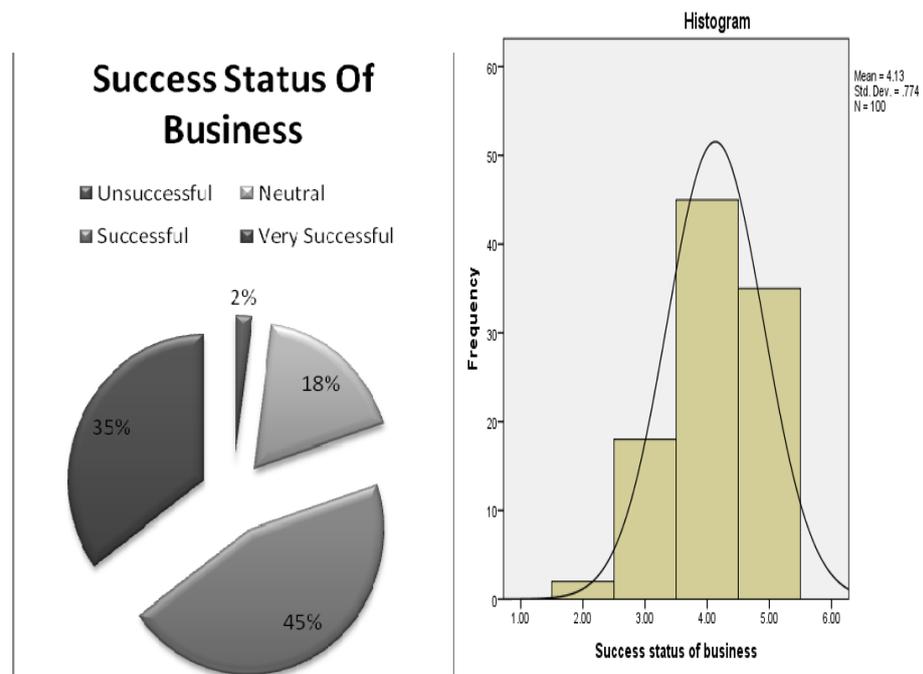


Figure 4.8 The success status of the companies where the respondents work.

4.9.8 Entrepreneurial and non entrepreneurial groups Descriptive statistics

The following descriptive statistics have been separated into the two groups created to test the hypothesis:

Respondents who are entrepreneurs (self employed)

Respondents who are employees (employed in leadership positions)

4.9.8.1 The age of the employees and entrepreneurs among the respondents

The majority of the employees 37 (61%) were “between 26-39”, with the lowest percentage 8 (13.3%) falling in the age group “below 25”.

The majority of the entrepreneurs 20 (50%) were “between 26-39”, with the lowest percentage 5 (12.5%) falling in the age group either “below 25”, or “above 55”.

Table: 4.10 The Frequency table of the age of the employees and entrepreneurs among the respondents.

Employee				Entrepreneur			
	Frequency	Per- cent	Cumulative Percent		Frequency	Per- cent	Cumulative Percent
Below 25	8	13.3	13.3	Below 25	5	12.5	12.5
26-39	37	61.7	75	26-39	20	50	62.5
40-54	6	10	85	40-54	10	25	87.5
above 55	9	15	100	above 55	5	12.5	100
Total	60	100		Total	40	100	

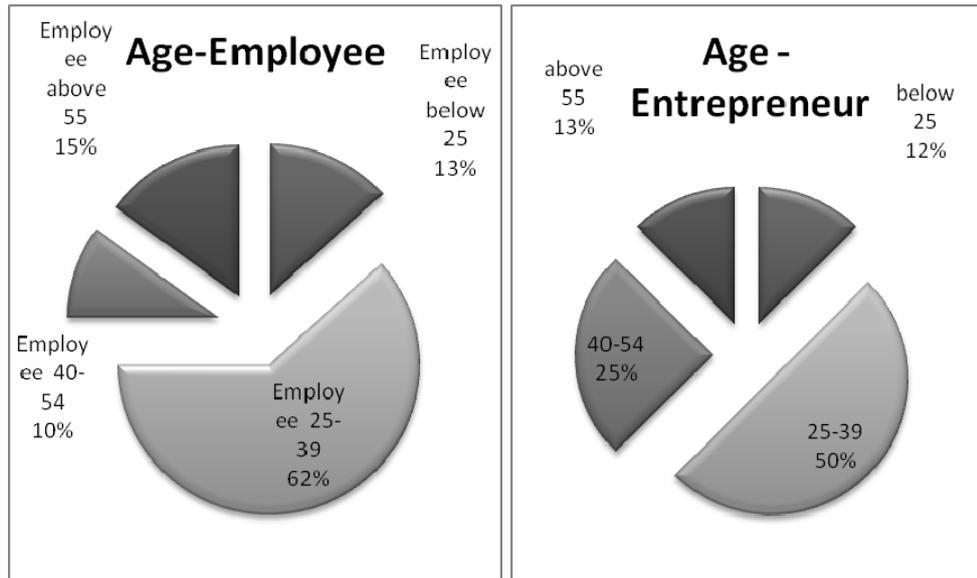


Figure: 4.9 The pie chart of the age of the employees and entrepreneurs among the respondents.

4.9.8.2 The gender of the employees and entrepreneurs among the respondents.

Among the employees majority i.e. 50 (83.3%) were “male” and 10 (16.7%) “female”.

The majority of entrepreneurs i.e. 37 (92.5%) were “male” and 3 (7.5%) “female”.

Table: 4.11 The Frequency table of the gender of the employees and entrepreneurs among the respondents.

Employee				Entrepreneur			
	Frequency	%	Cumulative Percent		Frequency	%	Cumulative Percent
Male	50	83.3	83.3	Male	37	92.5	92.5
Female	10	16.7	100	Female	3	7.5	100
Total	60	100		Total	40	100	

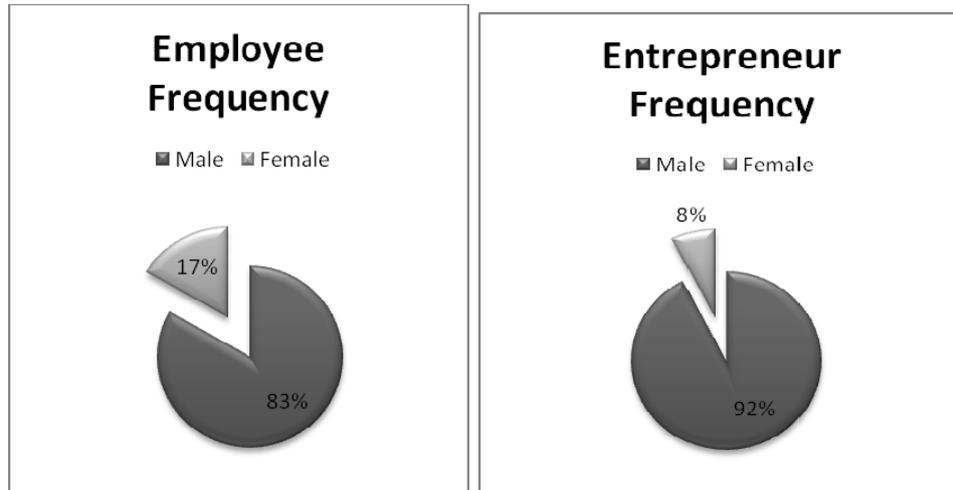


Figure 4.10 The pie chart of the gender of the employees and entrepreneurs among the respondents.

4.9.8.3 The size of the business the respondent works at.

Majority of the respondents who were employees worked for “large business” (i.e. 45%) and the least i.e. 6.7% worked for “professional practitioners”.

Of the entrepreneurs 55% had “small business” with less than 100 employees and the least number of entrepreneurs were 10% who had “large business” with more than 500 employees.

This indicates that there is a strong inclination to be employed in large business house and when it comes to starting new enterprises the size of the enterprise is small.

Table: 4.12 The Frequency table of the size of the business the employees and entrepreneurs among the respondents work at.

Employee				Entrepreneur			
	Frequency	%	Cumulative Percent		Frequency	%	Cumulative Percent
Professional practice	4	6.7	6.7	Professional practice	6	15	15
Small business	15	25	31.7	Small business	22	55	70
Medium business	14	23.3	55	Medium business	8	20	90
Large business	27	45	100	Large business	4	10	100

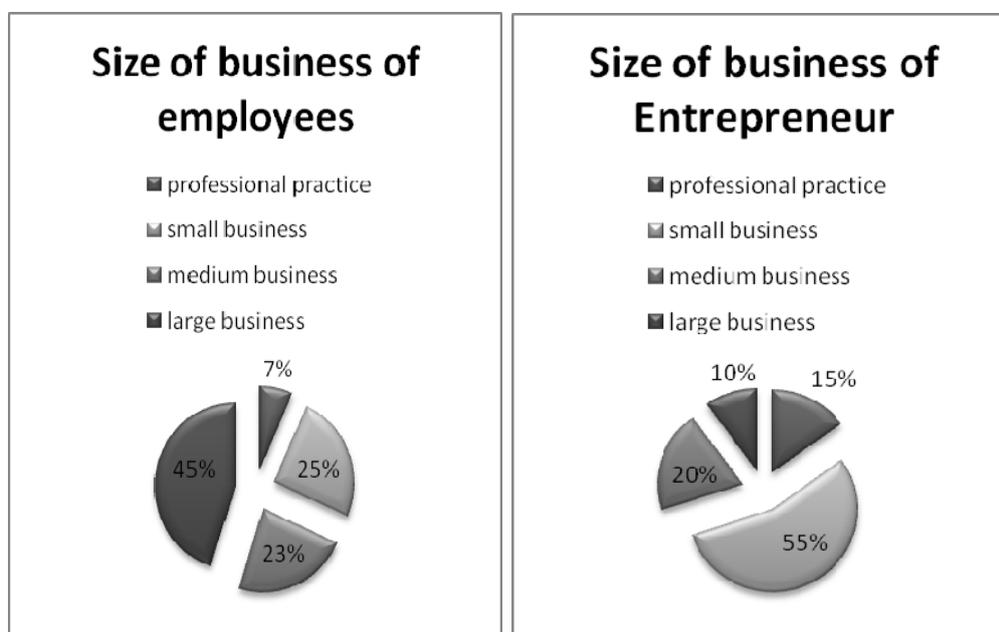


Figure 4.11 The pie chart of the size of the business the employees and entrepreneurs among the respondents work at.

⊕⊕⊕