
CHAPTER-IV

DATA ANALYSIS

4.1 INTRODUCTION

The first chapter includes the brief introduction of the research topic in a nutshell, also consisting of objectives, research questions, operational definitions and delimitations of the present study. In the second chapter, the researcher is going to review the research study conducted on the same topic for better understanding and to have more ideas about the topic. In the third chapter, the researcher is going to discuss about the research methodology used for conducting the present study which includes sample design, sampling technique, research design of the study, tools and procedure of data collection and analysis of collected data. In the fourth chapter, researcher explains the procedure adopted for data analysis.

Data Analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data. According to Shamo and Resnik (2003) various analytic procedures “provide a way of drawing inductive inferences from data and distinguishing the signal (the phenomenon of interest) from the noise (statistical fluctuations) present in the data”.

While data analysis in qualitative research can include statistical procedures, many times analysis becomes an ongoing iterative process where data is continuously collected and analyzed almost simultaneously. Indeed, researchers generally analyze for patterns in observations through the entire data collection phase (Savenye, Robinson, 2004). The form of the analysis is determined by the specific qualitative approach taken (field study, ethnography content analysis, oral history, biography, unobtrusive research) and the form of the data (field notes, documents, audiotape, and videotape).

An essential component of ensuring data integrity is the accurate and appropriate analysis of research findings. Improper statistical analyses distort scientific findings, mislead casual readers (Shepard, 2002), and may negatively influence the public perception of research. Integrity issues are just as relevant to analysis of non-statistical data as well.

4.2 DATA ANALYSIS

Data can be sometimes very reliable and valid but if not analyzed properly, the research is left with of no purpose at last. Hence the way data is analyzed and interpreted is very important. Data analysis is the process of systematically applying statistical and logical technique to describe, summarize and compare data. Analysis refers to a method of organizing data in such a way that research question can be answered and hypothesis can be tested.

Present study, titled as “A Study on the impact of female education on fertility behavior”. The study is based on primary data sources. The primary data is collected from women of Taraboi village of Khordha district of Odisha. The qualitative data was collected by interaction with women. Following statistical techniques were used for analyzing the data. The test used to find out the relationship between fertility behavior and female education and difference in awareness level on basis educational status are two tailed unpaired T-test including standardized interview schedule.

First the answers of MCQs were analyzed on the basis of percentage of women giving their responses. The percentage of women chosen particular answers are represented in pie chart. It helps giving a visual representation of the type of responses given by women and their level of awareness on fertility behavior. By analyzing this we can fulfill the first as well as second objectives. The reasons for choosing particular response were analyzed qualitatively. Finally, an unpaired two tailed T-test was carried out to find out the difference in their awareness level towards fertility behavior to fulfill third objective of the study. To check the awareness level among women towards fertility behavior, total 7 questions were asked to the respondents. For each positive answer, 1 point was given and for each negative answer 0 point was given. Then by calculating total marks of each respondent in each question, the table value of t' was calculated to find significant difference in their awareness level.

4.3 EDUCATION OF WOMEN

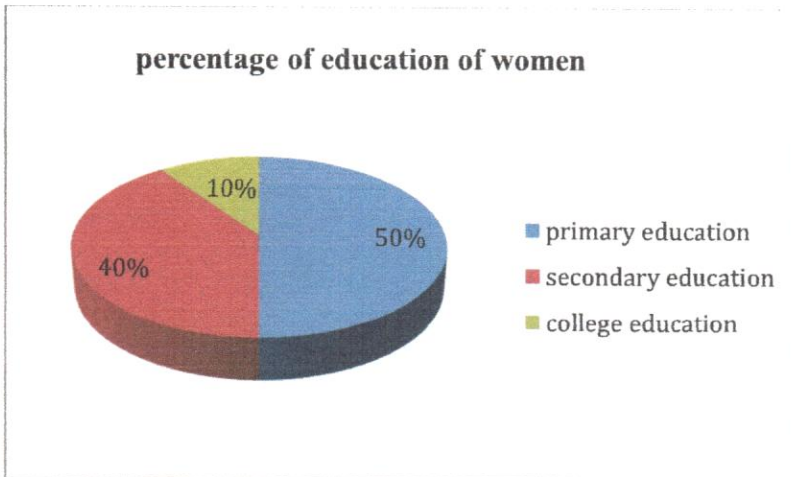


Figure-4.1: Percentage of Education of Women

Out of the total 50 women selected for study, 25(50%) of women have completed their primary education, 20(40%) of women having secondary education and only 5(10%) of the total sample have completed their college education.

The respondents have different occupations, 3 women are working as daily labor, total 17 working women (out of which 5 women are working as government employees and 12 are working in private sectors like NGOs, SHGs, providing private tuitions, tailoring and others) while most of them i.e. 30 women are working as house wives.

4.4 OPINION ABOUT WOMEN'S EDUCATION

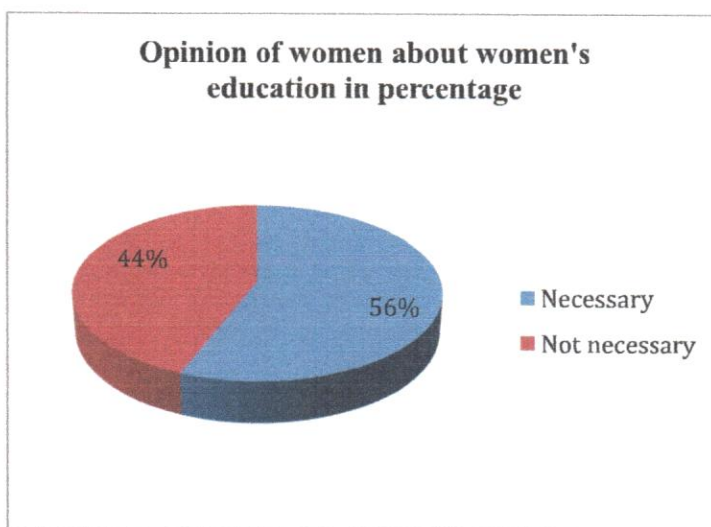


Figure-4.2: Opinion of Women about Women's Education in Percentage

While considering the opinion of respondents about girls' marriage and its relation with education of women, 28(56%) of women thought that a woman must be educated in today's society to get cope up with the contemporary needs of the society. They thought that a woman should have that level of education so that she can at least able to manage her own needs for which she should not always depend on her father/husband financially for the lifetime. Also, some of them stated that in changing society of modern trends in all fields, especially in the field of education and technology where it is mandatory to have basic qualification of parents, if they want their child to study in a good educational institution. Where a mother needs to be educated so that she can able to teach her child at least up to primary education and by doing some jobs she can also support her family financially.

On the other side, only 22(44%) women thought that education is not so much necessary for a woman, as their primary thought revolves around the mindset that a girl ultimate goal of life is marriage then why should someone waste almost half of their life in study and doing jobs. They thought education is a waste of time and money and the money which spend during study should be saved for girl for her marriage in future. They thought if a girl is more educated in today's society, then it is difficult to find groom for her and also parents have to give a high amount in the form of dowry if they want to match the educational level of their daughter with her husband.

33 women (18 educated and 15 uneducated) agree with the thought that higher educated girls generally desire to marry at a late age than less educated girl, as they thought if a girl is more educated then most of them want to achieve something in her career either by doing job or by pursuing higher studies which ultimately leads late marriage. On the contrary, 17 women (7 educated and 10 uneducated) disagree with this idea. They disagree with this idea as they thought there is somehow no effect of marriage on education where a girl can even continue her study even after marriage.

4.5 OPINION ABOUT MARRIAGE

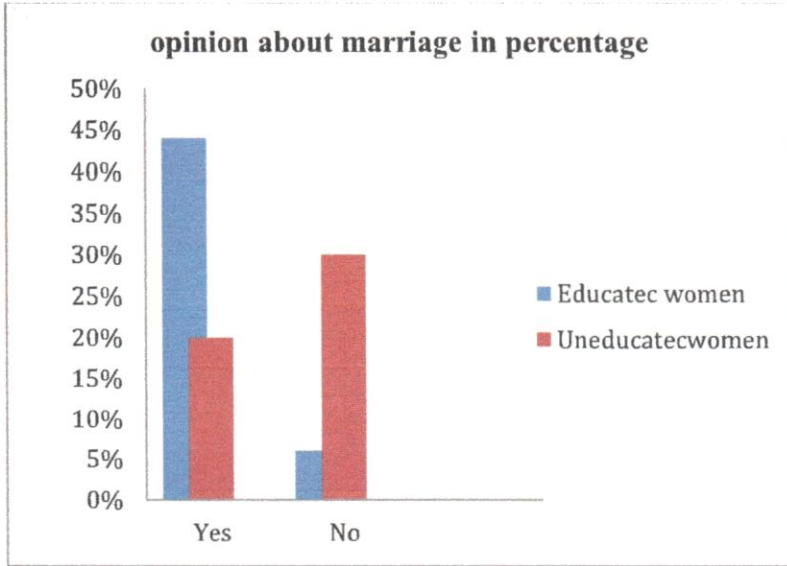


Figure-4.3: Percentage of women's opinion about marriage

For reducing population, there should have right awareness among the people about fertility behavior and they should have proper knowledge about initiatives taken by government to reduce overpopulation and to provide mother and childcare protection. One of great initiative taken by government in this area is having a legalized age for marriage both for male and female. From this study, it has been found that 32(64%) women (22 educated and 10 uneducated) are about the legalized for marriage. Out of this, only 20 women known that 18 is legalized for marriage for female. Where 18(36%) women (3 educated and 15 uneducated) don't even know about this government rule, as most of the girls in village get married at early age.

4.6 IMPACT OF FEMALE EDUCATION ON FERTILITY BEHAVIOUR

It is a well-established fact that no education in the people develops the ignorance and superstition which can lead to higher fertility. On the other hand, education can influence the norms and values of individual people particularly among women and enable to question the value of traditional practice of the parents or the authority. Further extended education provides opportunities for late marriage, better job and income and hence helps to offer vocational alternative to child bearing and rearing. In this connection, it has also been observed that biologically child bearing age of a woman is 15 to 44 years, if a woman was educated, usually she has lesser child bearing span due to her late marriage than that of uneducated woman. Indeed, women with higher education have usually passed out the most

fertile period while pursuing their studies. Thus, lower fertility may closely link up with the spread of higher education among women.

This chapter is an attempt to study the fertility differentials such as living children, additionallive-births desired; ideal family size norm, belief about conception, value of son preference, etc. are among educated and uneducated women.

4.7 BELIEF ABOUT CONCEPTION

Usually in the tradition society one's fertility behavior has been depend on their general belief about conception. Suppose, those who are believed that the child birth is an exclusively as the result of man's desire or function of parents, to have greater control over their fertility behavior. In contrast to that those are believed that child birth is an exclusively as a gift of 'God' then none of them do not seem to interfere with conception leaving the occurrence of pregnancy to the nature.

Table -4.1: Percentage distribution of respondents' opinion about conception of children

| Opinion of conception | Educated women | Uneducated women | Total |
|------------------------------|-----------------------|-------------------------|---------------------|
| Man's desire | 72% (18) | 24% (6) | 48% (24) |
| Gift of God | 28% (7) | 76% (19) | 52% (26) |
| Total | 100% (25) | 100% (25) | 100% (50) |

In table, the value inside the bracket indicates the number of respondents of that particular category

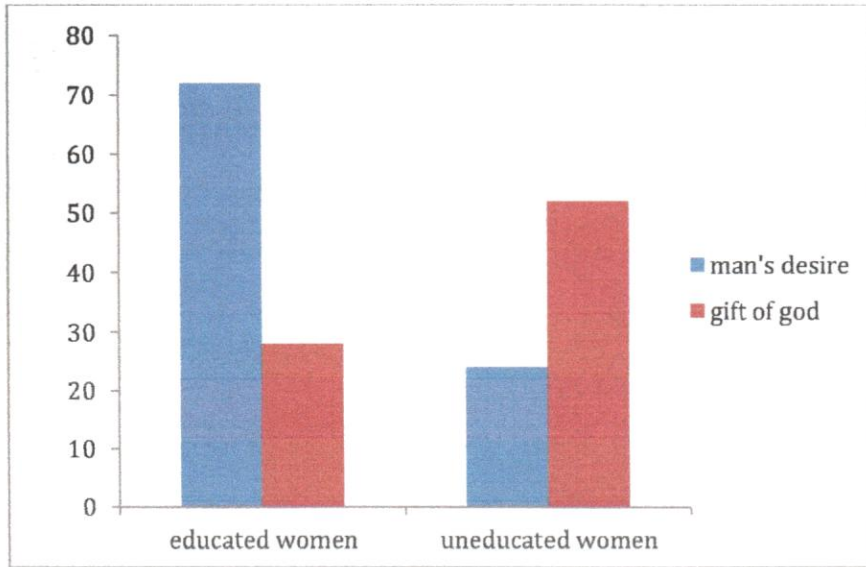


Figure-4.4: Percentage distribution of respondents' opinion about conception of children

In the present study an over-whelming proportion (72%) of educated women believed that child birth exclusively result of man's desire than their counter-parts (24%). On the other hand, about three-quarter per cent of uneducated or less educated women believed that child birth as the function of 'God' (traditional view) in contrast to only 28 per cent of educated women believing the same.

Table-4.2: Distribution of number of women belong to particular category indicating time gap between first pregnancy

| Category | Time gap Between First Pregnancy | | Total |
|-------------------------|----------------------------------|------------|-------|
| | (0-1 Year) | (1-2 year) | |
| Educated Women | 4 | 21 | 25 |
| Uneducated Women | 19 | 6 | 25 |

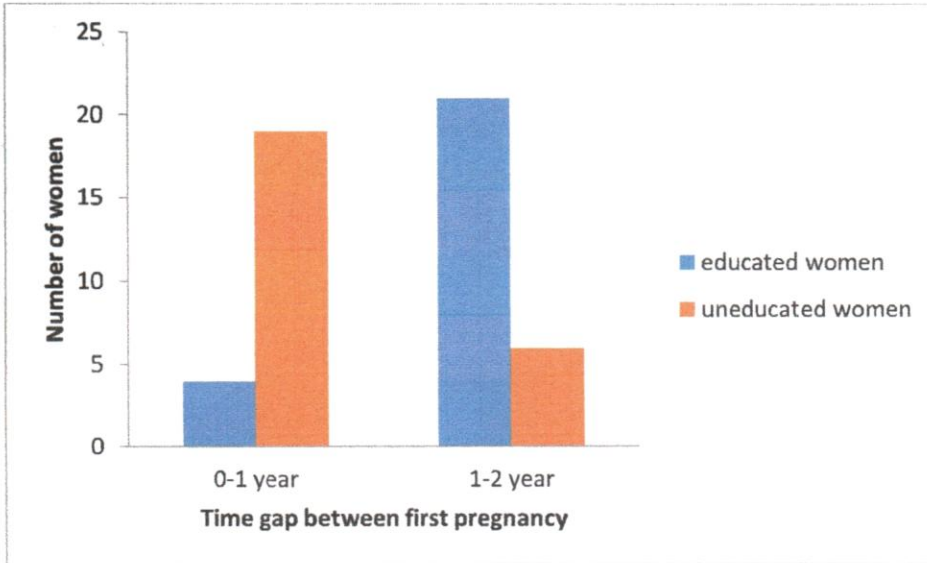


Figure-4.5: Distribution of number of women belong to particular category indicating time gap between first pregnancy

In the study it was found that the indices which indicate the fertility rate of women on the basis of their education are time gap between their first pregnancy and number of children. Out of the total educated women i.e. 25, 4 belongs to the category of women having child between one year of her marriage, while in the counterpart 21 women belongs to the category having their first pregnancy after 1 year of marriage.

Table-4.3: Distribution of number of women belong to particular category indicating number of children

| Category | Number of Children | | Total |
|-------------------------|---------------------|---------------------|-------|
| | Less than 2 | More than 2 | |
| Educated Women | Less than 2 (23) | More than 2 (2) | 25 |
| Uneducated Women | Less than 2 (13) | More than 2 (12) | 25 |

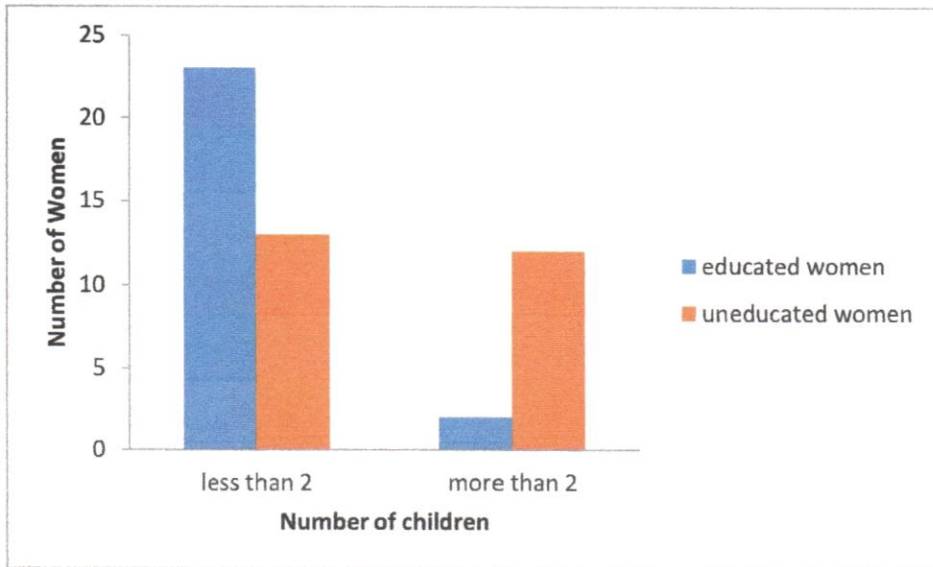


Figure-4.6: Distribution of number of women belong to particular category indicating number of children

From the table-4.3, it was found that number of children is considered as an important factor which gets affected by mothers' education. It was again divided into two sub category i.e. having less than 2 children and more than 2 children. Out of which 23 educated women have less than 2 children and 2 have more than 2 children. While the numbers are comparatively very less in case of uneducated women and i.e. only 13 women have less than 2 children and 12 women have more than 2 children

In the present study, it was found that uneducated women tend to have higher fertility in comparison to educated women was confirmed by the fertility index presented in Table-2 and Table-3. The uneducated women on an average had more births as compared to educated women. Similarly, number of living children and ideal family size norm are more among uneducated women compared to educated women. Thus, fertility of uneducated women is expected to be higher as compared to that of their counter-parts (educated women). One of the plausible reasons is that the high fertility among uneducated women was due to the influence of non-availability of higher education.

To find out the difference in awareness level of educated and uneducated women on fertility behavior from the above discussion, the researcher was conducted unpaired t-test. In this test the total sample was divided into 2 groups on the basis of their literacy.i.e. educated and

uneducated women. Different factors which have significant effect on fertility behavior such as outcome of conception, time gap between first pregnancies, no. of children, opinion on family planning, and gender preference are considered as variables. In interview responses are assigned some points like for choosing positive response, there was 1 point and for negative one it was 0. On the basis of the total point obtained by women in particular category this test value has been calculated as fulfill the third objectives.

Table-4.4: Education wise Mean, SD, N, and t-values of awareness level of Women

| Types | N | Mean | SD | t-value | Level of Significance |
|-------------------------|----|------|------|---------|-----------------------|
| Educated Women | 25 | 6.24 | 1.09 | 12.97 | 0.05 |
| Uneducated Women | 25 | 2.4 | 1 | | |

$$Df = 25+25-2=48$$

The obtained t at 0.05 level=12.97

Tabulated' at 0.05 level= 1.906

$$12.97 > 1.906$$

The tabulated value of 't' for 48 degree of freedom (D.F.) and at 5% significant level is 1.906. Since calculated value of 't' (12.97) is greater than the tabulated' value, it is significant at 5% level of significance.

4.8 CONCLUSION

The tabulated' is less than the obtained'. There is a significant difference in awareness level of educated and uneducated women. The study revealed the difference in awareness level of women on the basis of their education towards fertility behavior. It was observed that women having less educational qualification have less awareness about family planning. The study also showed that education has great impact on fertility behavior of women.