

Statistics



**ASSIGN
BUSTER**

The paper “ Part -Time Flexible Job - the Only Option People Would Want to Take Given a Choice" is a perfect example of a research paper on human resources. The research project detailed in the following sections was conducted to test a hypothesis on part-time jobs, using the exploratory method. The basic steps were to define the problem/ hypothesis, collect data, analyze and report results.

Statistics, as we are aware, borrow some concepts from sociology and since it is broadly a study of human behavior, one probably cannot claim the precision of sciences and yet draw reasonably significant conclusions to base additional thoughts, interpretations and actions on these results. This project was an observational study, aimed to understand a particular human preference and the popular notions/ reasons that drive a specific choice. The results can be used to initiate policies and options to accommodate people’s choices for mutual benefit to the company and candidate.

The responsibility of a researcher is not developing a research question but finding answers. While deciding on the question, however, it is important to consider its significance and social relevance. The entire research strategy, framework, population for data samples, statistical models to build theories or test hypothesis is solely dependant on this very critical step – identifying the question/ problem/ hypothesis. In this project, the question was what do people generally prefer to do if they have two career options - Part-time flexible job or Full-time fixed-job and the probable reasons behind their choice.

Hypothesis:

This research was aimed to test the hypothesis - Part-time flexible job is not just a popular choice but the only option people would want to take, given a choice, at any point in time.

Research Data

Raw data provides information which becomes fact and is later integrated as knowledge. Information qualifies as fact only when the data can support it. Statistical data analysis is required to place knowledge on a systematic evidence base.

Collecting Data:

The designing of data collection in statistical analysis is a very critical step which has two important aspects listed below – defining the population and identifying the sample – a subset of that population. The mathematics of extending knowledge obtained from a random sample from a population to the whole population is known as Inductive Reasoning. Due to time and cost constraints, it is not feasible to test the entire population.

In order to test the hypothesis, the population considered for sourcing data are professionals, students, homemakers, corporate people, and job consultants. One can also work on two independent populations to capture any difference/ variance and understand the confidence limits. For illustration, 30 samples have been considered from different walks of life, across different areas.

Data can either be qualitative – labels or names used to identify an attribute of each element or quantitative – numeric data that indicate either how much or how many. To test the hypothesis, we will use qualitative and cross-sectional data. Cross-sectional data are collected approximately the same point in time, unlike time series data which is gathered over several time periods. We can assume, the period was first three days in the month of December for conducting the surveys by three modes - Interviews over the phone, by mail and in person.

The survey instrument used to source data for this hypothesis was a simple questionnaire with just three questions.

1. What is your preference – part-time flexible job or full-time fixed-job?
2. Why would you prefer this option?
3. At a later date, would you want to change this option?

Method Analysis

This is mainly an observational study, with no attempt made to control or influence the variables of interest. A survey is the most common type of observational study which has been the choice to test this hypothesis. There has been used of computers and excel in particular, in this statistical data analysis

Analyzing the Data

Methods of data analysis can either be exploratory or confirmatory. No ideas from probability theory have been used to draw an inference in this hypothesis, which rules out the confirmatory method. Here an exploratory

method is used to conclude what the data seems to be saying by using simple arithmetic and easy to draw results. In decision making probability, a factor is important as it provides a platform for measuring and analyzing the uncertainties linked with future events. Meta-Analysis is the result derived from many results which will be applicable if the survey is conducted on a broader horizon. No historical data has been considered. The evaluations are mainly based on the survey data captured in the attached excel sheet.

Results

The inferences and test results have been captured in a pie chart. Because only a small collection (sample) has been examined and not an entire population, the reported results should ideally reflect the uncertainty through the use of probability statements and intervals of values. The reasons collected in response to question two have been categorized as follows based on the similarity of responses, worded differently by various respondents.

- Multiple Interests
- Priority of commitments
- Specific Need/Relaxation.

Conclusion

Simple Mathematics indicate 83% of the selected population prefer part-time which only confirms the hypothesis we had assumed for this survey. Filtering data in the excel sheet and calculating percentages for each profession would also bring similar results. For example, 86% of student prefer part-time jobs.

The need for preferring part-time jobs is not just goaded by circumstances but individual needs at a specific point of time. The fact that most of the respondents answered in a definite yes or no indicates, their preference is not just temporary but thought through for future needs and circumstances as well.

The success and futility of this exercise lie in incorporating the findings or customizing corporate, universities and other institution's plan of action regarding labor force based on these results. If the future is slightly inclined towards part-time labor force, it is about time, the concerned authorities gear up and get their workforce planned accordingly.

- There is a definite preference for part-time jobs compared to full-time jobs.
- This survey would bring altogether different results if part-time options were considered for fixed, specific hours and the respondents were asked accordingly.
- The findings on the reasons for part-time job preference could be different had samples been considered across a wider geography, across countries.
- With two independent population and including other labor class and sections of the society would affect results as well.