**A RESEARCH**

 A research is defined as systematic evaluation of a general thought to find the truth through scientific method in social interest. Research is charaterized by a research question.

**OBJECTIVES OF RESEARCH**:

Research is a conscious approach to find out the truth which is hidden and which has not been discovered by applying scientific procedure. Therefore each research has its own focus.This is stated in terms of objectives.

 Objectives are like guide points in research, that the researcher does not nose his focus it is also believed that the objectives determine the nature of data to be compiled, the scope of collection, target group, sample size and several other crucial aspects which ultimately decide the success or failure,adequacy or in failure, adequacy or research.

 **Criteria of Good Research (characteristics)**

1. Research is half complete, when objective or purposes of it are clearly spelt out.
2. It is necessary that every step followed in the process of research is explained fully.This is because any other person who wants to repeat such a work to achieve furtherimprovement on lest the validity of the research work should be able to do it.
3. The research design adopted for the study should be clear and match with objectives.
4. The research should be honest in reporting the facts and revealing the flaws in thework.
5. Every research work should be based on carefully selected analytical tools.
6. The research work is incomplete without acknowledging the various data (or) facts.
7. Limitations should be frankly revealed

 **Qualities of Researcher**

1. ✔ Finding/searching/developing/compiling something new
2. ✔ Verifying theories or concepts or advancing old concepts
3. ✔ Using scientific method
4. Qualities of a good yoga researcher
5. ✔ Must related to core area of research
6. ✔ Must Practice Higher practices and experience the effects
7. ✔ Application of yoga practices with module development with limitations and benefits
8. ✔ Compare Science and Scripture e.g. scriptural research
9. ✔ Keep technological updates and mix those tools
10. ✔ Experiemental verification through scientific method
11. ✔ Eye for details & Genuine interest in people.

 **Types of research**

Classification is done for the sake of convenience.

 Various permutations and combinations are possible. Some categories may overlap. Main point is good/concrete evidence which is clean. It is better to focus on quantitative research.

 **On the basic of General**

 1) Basic- Why and how of a phenomina. We see the fundamental research questions or just the mechanism. Novelty is top most. E.g. What happens with right nostril breathing.

2) Applied- Here we see if we can use basic research

**On the basic of Technique**

1. Experimental- Chose sample, collect data and analysis. Here we experiment and prove with evidence.
2. 2) Theoretical- Conceptual theory framework.

**On the Basic of Methodology**

 1) Qualitative- Experience and non numerical

 2) Quantitative- Numerical involving statistical analysis

3) Mixed- Mixture of both qualitative and quantitative

 **Research Process**

**Research process is a 7 step process spread in 3 phases**

1**) Methodology (Planning)**

 (a) Research question- Doable, Unique, Socially relevant

b) Literature review- To see what has been done and what needs to be done

 c) Design- Experimental plan/blueprint

**2) Techniques of data collection (Execution/Implementation/Action)**

 (d) Data collection- Actual process

**3) Statistical analysis (Analysic/Postmortem)**

e) Analyze & Interpret

 f) Infer and make conclusion- Information you derive, you become aware here.

 g) Dissemination- Publication in journals and presentations

The time to do all phases may be different. After data collection experiment is dead and must be revived during post mortem. Analysis is also part of planning as its not necessary to have data to do analysis. The 1) Methodology and 3) Statistical analysis are like wings and must be strong

 **Phase 1- a) Research Question**

1. Research Question- A question intended to be solved scientifically.
2. Qualities of a research question

 1) Doable (Time bound, Tangible)

 2) Novel/Unique

 3) Socially relevant Scientific Method v/s Non Scientific method Scientific Method (Facts based

 **Types of Research question**

 1) Descriptive- Here we describe things as they are. They are opinion. E.g male and female in Msc..

2) Correlational- Finding relationship between two variables

3) Causal- Which identify cause and effect relationship between two variables. They are one on one. E.g punch and pain.

Correlation is not causal but causal is always correlational. E.g one person introduces new flavors of ice creams in the market. Now the demand goes up for ice creams. He comes to conclusion that because of him only the demand for ice creams has gone up. But it can be due to summer heat also. Therefore many factors effect correlation. But causal is definite.