**Explanatory research**

**Introduction**

When we design, we shape! We do so in order to make work looks better.

***What about design research?***

        Before examining types of research designs, it is mandatory to be clear about its role and its purpose:

The researcher needs to understand what research is & what is it not.

The researcher needs to know where design fits into the whole research process from framing a question to finally analyzing and reporting data.

**Explanatory research**

**Definition**

When the purpose of the study is to explore a new universe, one that has not been studied earlier, the research design is called explanatory (Akhtar, 2016). Explanatory research is a method designed to delve into a phenomenon that has not been adequately studied or explained. Its primary objective is to provide a deeper understanding by uncovering the “why” and “what” of the subject under investigation. This helps researchers gain insights and identify areas that need further explanation in the future. It is a tool best for guiding to a better understanding of how and why something occurs when only small amounts of information is available pertaining to that topic. But it does not provide conclusive results due to a luck of statistical strength.

Akhtar, Dr Inaam (2016).

What is particular for explanatory research is the focus on the ‘Why’ question, for example, if researchers want to investigate the impact of a new teaching method on student performance in mathematics. They would design a study where they select a group of students and divide them into two groups: one group receives the traditional teaching method, while the other group receives the new teaching method. Researchers then collect data on the students’ performance, such as test scores, and analyse the results to determine if there is a causal relationship between the teaching method and student performance. This explanatory research design allows researchers to understand the cause-and-effect relationship between the teaching method and student outcomes.

* How explanatory research is used?

Explanatory research design is determined by the research method used to investigate probable causal relationships, which is often an experiment. Explanatory study seeks to either explain how the phenomenon arose, tracing it from its inception until it took on its current shape, or to explain its occurrence by searching for the circumstances that lead to its development in steps. The first stage is to become acquainted with the issue in order to formulate a research question. The following phase is to address expectations, whether there is current literature or if the topic has not been well researched. The following step is to choose data collection and analyses methods. Data collection begins after meticulous planning. Following data gathering, information is analysed and reported. The findings are interpreted, and explanations for unexpected findings are given.

**Reference**

Akhtar, L. (2016). Research in Social Science. Interdisciplinary Perspectives ,p,77