

Discussion 7



Discussion Articles: Experimental Research Design and Quasi-Experimental Design

An experiment is a process or study which results in data collection. The results of the experiments are not known in advance. Usually, statistical experiments are conducted in situations in which researchers can manipulate the conditions of the experiment and can control the factors that are irrelevant to the research objectives. An experimental research design is aimed at investigating the possible cause and effect relationship by manipulating an independent variable to influence other variable in an experiment, and by controlling other variables also in the experiment and measuring the effects of the treatments using some statistical means. A number of experimental research designs are available for use in general social research (Srinagesh).

A quasi-experimental study is a type of experiment that examines outcomes. However, they do not involve randomly assigning participants to treatment and control groups. A quasi experiment study might compare outcomes for individuals receiving program activities with outcomes for a similar group of individuals not receiving program activities. This type of study might compare outcomes for one group of individuals before and after the group's involvement in a program. Quasi experimental designs are very useful because of their ability to inform the discussions of cause and effect; however, unlike other experimental approaches such as true experimental studies, they cannot definitively establish this link (Creswell).

In this discussion two articles are used one using the experimental approach and the other using the quasi experimental approach. In the first article titled Learning social studies through mastery approach. The study involved two groups the experiment group and the control group. There were two

independent variables in this case and they include: mastery learning strategy and conventional strategy. The dependent variable was only one and this was performance in social studies (Adeyemi). In the second article titled an analysis of the interactive behaviors of self-learning management in a web-based Moodle e-learning platform. The independent variables in this case were the Moodle learning platform and the traditional instruction. The dependent variables included obtaining the basic energy concept, submission of homework through the homework section and submission of project reports through homework section (Liao and Lin).

In the first article, treatment involved the researcher obtaining course contents in social studies. These were then formed into one course called national development and planning. The unit was broken down to teachable units for reflective teaching and learning. The second step involved randomly assigning students into two groups. The experimental groups were presented with the mastery learning strategy while the control groups were presented with the conventional strategy (Adeyemi).

The second article that involved the quasi experimental research design, the two groups took pretests before the experiment. In the next step, five to six people were divided as a group based on the ranking of the pretest with S distribution. The students' pretest scores were then prioritized and divided into four experimental groups and four control groups with S distribution. The experimental groups took experimental treatment, while the other control group took no treatment. However, the two groups took post-tests at the end of the experiment (Liao and Lin).

The first article using the experimental design used a post-test only and control group experiment while the second article that used the quasi-

experimental approach adopted both a pretest and a posttest control group design (Adeyemi: Liao and Lin).

In my view the research designs used in the two articles were appropriate for the studies as they led to the achievement of the study objectives effectively. Little if any can be changed about them as they suit the purposes for which they set out to achieve and this is very important in social research.

Works Cited

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