

# [Multiple correlation and regression](https://assignbuster.com/multiple-correlation-and-regression/)

Multiple Correlation and Regression In the first post for this discussion the purpose for this study was to find out how young children psychological development is affected in families which experience domestic violence. Therefore, the study set out to establish what effects domestic violence in families, have on the psychological development of young children in the United States. As earlier established, domestic violence has been studied for quite a long period of time but its effects have been studied on a general basis. This study thus narrows down to look at the psychological development of young children and how domestic violence has impacted it.   
There are two variables in research: the independent and the dependent variables. If a change is one variable does not cause a subsequent change in the other, then the first is an independent variable. In the event that one causes a change in the other then the former is a dependent variable (Creswell, 2003). In this study the independent variable was psychological problems while the dependent variable was normal development.   
Measuring variables is very important so that it can be understood how the different variables affect each other. There are complex methods that may be used in measuring methods but all these depend on the research design adopted (Kothari, 2006). In this study, the variables were put into categories where they were measured against each other. For example the children were put into categories that match the various variables that were being surveyed. Depending on the criteria of selection each student was either categorized as falling in a family experiencing domestic violence or not.   
Experimental designs have true scientific designs that require the presence of a hypothesis, two groups: the control group and the treatment group and a larger sample size in order to avoid accidental differences from affecting the study. A quasi experiment on the other hand is not a true experiment and may involve some of the above factors but not at all times (Goddard & Melville, 2007). The study was not a true experiment and thus followed the quasi experimental design.   
The research instruments that were used in the study included surveys. These were conducted by selecting an appropriate sample size that was representative of the whole population. Appropriate methods of sampling were used and this increased the validity of the study as it was representative of the whole population. The survey instruments were reliable because they were designed in such a way that errors were minimized and there were very high chances that the results could be similar even in repeat studies. Categorizing the participants was done using the variables based on nominal and ordinal scales.   
The study results were valid because from the start the categorized made were followed to the latter ensuing that all the participants fall in either of the categories. The survey instruments were also designed in a way that enabled easier collection of data to respond to the study questions and test the various hypotheses established.   
The quasi-Experimental design that was used in the study has various limitations. The first is that they require proper randomization to take place in the study otherwise the statistical results will be less meaningful. Secondly the design can be very unreliable in cases where there are many factors affecting the variables thus affecting the study outcomes. The best method is to design the study to take the experimental approach (Goddard & Melville, 2007).   
The report was very detailed and has explained how the research was conducted with a number of issues and factors being made clear. It has made me understand the various requirements that differentiate the experimental study designs and how samples should be selected for any study. It has also made me understand the various things that should be taken into consideration as concerns the datasets.   
References   
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Goddard, W., & Melville, S. (2007). Research methodology: An Introduction. Cape Town: Jutaonline.   
Kothari, C. R. (2006). Research Methodology: Methods and Techniques. New Delhi: New Age international publishers.