



**Web Report on Workshop on “Research Methodology and Statistical Analysis using SPSS”**

<b>Title</b>	Workshop on Research Methodology and Statistical Analysis using SPSS
<b>Date</b>	August 12, 2017
<b>Resource Person/Facilitator</b>	Dr. Asha Chawla, Associate Professor, G.V.M. Girls College, Sonapat
<b>Summary</b>	<p>Research methodology and statistical analysis are the approach through which direction and significance of research is clarified. In this session, the term exploratory factor analysis was discussed with suitable examples. EFA is a technique within factor analysis whose overarching goal is to identify the underlying relationships between measured variables. It is commonly used by researchers when developing a scale (a <i>scale</i> is a collection of questions used to measure a particular research topic) and serves to identify a set of latent constructs underlying a battery of measured variables. It should be used when the researcher has no a priori hypothesis about factors or patterns of measured variables. <i>Measured variables</i> are any one of several attributes of people that may be observed and measured. An example of a measured variable would be the physical height of a human being. Researchers must carefully consider the number of measured variables to include in the analysis. EFA procedures are more accurate when each factor is represented by multiple measured variables in the analysis.</p> <p>Dr. Chawla set the momentum of the programme with a detailed session on Exploratory Factor Analysis, Reliability and Validity and Different scale development skills. She started her session with a basic introduction on Factor Analysis and gradually progressed to the analytical intricacies.</p>

Madam explained the concept of EFA and its various applications. It was explained that EFA is used on Likert scale on metric data. The relevance of 5 point and 7 point Likert scale was also discussed.

The speaker addressed queries of the participants wonderfully and gave suitable examples. The workshop was very well appreciated by all the participants and equipped all the participants with new tools and techniques to apply in their respective research areas.