

Lesson 10: Chapters 14 and 15

- **Learning Objectives**

Ch 14 – Statistical Analysis of Quantitative Data

- Describe the four levels of measurement and identify which level was used for measuring specific variables
- Describe characteristics of frequency distributions and identify and interpret various descriptive statistics
- Describe the logic and purpose of parameter estimation and interpret confidence intervals
- Describe the logic and purpose of hypothesis testing and interpret p values
- Specify appropriate applications for t -tests, analysis of variance, chi-squared tests, and correlation coefficients and interpret the meaning of the calculated statistics
- Understand the results of simple statistical procedures described in a research report
- Identify several types of multivariate statistics and describe situations in which they could be used
- Identify indexes used in assessments of reliability and validity
- Define new terms in the chapter

Ch 15 – Interpretation and Clinical Significance of Quantitative Research

- Describe dimensions for interpreting quantitative research results
- Describe the mindset conducive to a critical interpretation of research results
- Identify approaches to an assessment of the credibility of quantitative results, and undertake such an assessment
- Distinguish statistical and clinical significance
- Identify some methods of drawing conclusions about clinical significance at the group and individual levels
- Critique researchers' interpretation of their results in a discussion section of a report
- Define new terms in the chapter

- **Assignments**

- **Readings:**
 - Devotional
 - Chapters 14 and 143
- **Videos:** watch the videos
- **Finish preparing your presentation for the Research Conference**