

9.6: Chapter 9 Summary

This chapter introduced us to ANCOVA methodology, which accommodates both continuous and categorical predictors. The model discussed in this chapter has one categorical factor and only the linear effect of one single covariate, the continuous predictor. We noted that the fitted linear relationship between the response and the covariate results in a straight line for each factor level and the ANCOVA procedure then depends on the condition of equal slopes. One advantage of ANCOVA is the ability to examine the differences among the factor levels after adjusting for the impact of the covariate on the response.

The salary data comparing males and females after accounting for their years after college illustrated how software such as SAS and Minitab can be utilized in analyzing data using the ANCOVA procedure. In the next chapter, the ANCOVA topic will be extended to include up to a cubic polynomial as the regression model of the response vs. covariate.

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