

Statistics and golf ball

[Sport & Tourism](#)



Case Study1: Par, Inc. Par, Inc. , is a major manufacturer of golf equipments. Management believes that Par’s market share could be increased with the introduction of a cut-resistant, longer-lasting golf ball. Therefore, the research group at Par has been investigating a new golf ball coating designed to resist cuts and provide a more durable golf. The tests with the coating have been promising. One of the researchers voiced concern about the effect of the new coating on driving distances. Par would like the new cut-resistant ball to offer driving distances comparable to those of the current-model golf ball.

To compare the driving distances for the two balls, 40 balls of both the new and current models were subjected to distance tests. The testing was performed with a mechanical hitting machine so that any difference between the mean distanced for the two models could be attributed to a difference in the two models. The results of the tests, with distances measured to the nearest yard, follow. These data are available on the excel file “ Golf”.
Managerial Report 1. Formulate and present the rationale for the hypothesis test that par could use to compare the driving distances of the current and new golf balls. . Analyze the data to provide the hypothesis testing conclusion. What is the p-value for the test? What is your recommendation for Par, Inc.? 3. Provide descriptive statistical summaries of the data for each model. 4. What is the 95% confidence interval for the population mean of each model, and what is the 95% CI for the difference between the means of the two populations? 5. Do you see a need for the larger sample sizes and more testing with the golf balls? Discuss. Case Study 2: HigherEducationin

Asia-Pacific The pursuit of a higher education degree in business is now international.

A survey shows that more and more Asians choose the MBA degree route to corporate success. The number of applicants for MBA courses at Asia-Pacific schools continues to increase about 30% a year. In 1997, the 74 business school in Asia-Pacific region reported a record 170, 000 applicants for the 11, 000 full time MBA degrees to be awarded in 1999. A main reason for the surge in demand is that an MBA can greatly enhance earning power. Across the region, thousands of Asians show an increasing willingness to temporarily shelve their careers and spend two years in pursuit of a theoretical business qualification.

Courses in these schools are notoriously tough and include economics, banking, marketing, behavior sciences, labour relations, decision making, strategic thinking, business law, and more. The data named “ Asian” shows some of characteristics of the leading Asia-Pacific business schools. Managerial Report Use the methods of descriptive statistics to summarise the data. Discuss your finding. 1. Include the summary for each variable in the data set. Make comments and interpretations based on maximums and minimums, as well as the appropriate means and proportions.

What new insight do these descriptive statistics provide concerning Asian-Pacific business schools. 2. Summarise the data to compare the following: a. Any difference between local and foreign tuition costs. b. Any difference between mean starting salaries for schools requiring and not requiring work experience. c. Any difference between mean starting salaries for schools requiring and not requiring English tests. 3. Do starting salaries appear to be

related to tuition? 4. Present any additional graphical and numerical summaries that will be beneficial in communicating the dataset and others.