



Final Project

Fifa World Cup

By: Isaac Jimenez

History of the FIFA World Cups

This tournament is held every four years and it gives every qualifying country an opportunity to bring the trophy home. It's the biggest sporting event and it gives the host's country the public eye which promotes their brand and culture.

Only 17 countries have hosted the world cup and it's becoming a competitive race to grab the spot to host it the following time. It's up to the Federation of Association Football to choose and there's been reported bribery and bias.



Hypothesis testing

Question: There have been reports of council men of FIFA choose European countries to host over any other continent hence making people only show up more to the Europe hosted tournaments. We want to know if this is true.

Null Hypothesis: The tournament has been hosted 21 times Europe has hosted the same amount of matches as South America has.

Mean for amount of matches hosted by South America: 34.8

Mean for amount of matches hosted by Europe: 42

Difference in means- 7.2

SD of both- 9.777711

Z score- 0.7363687

P value- -0.7692468

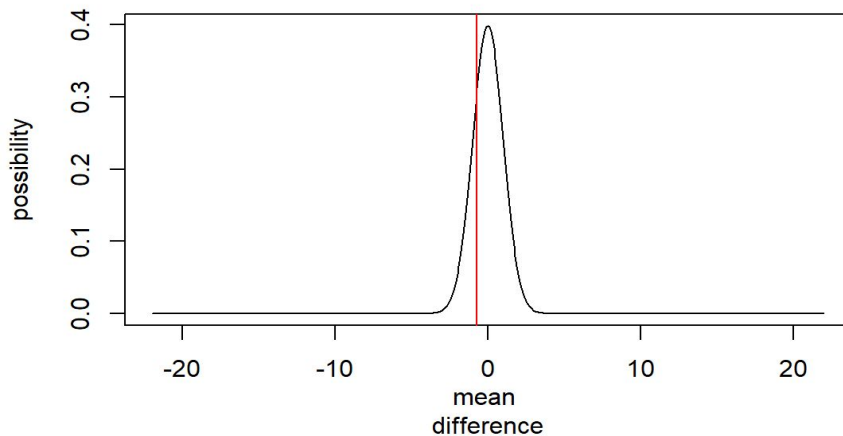


Hypothesis testing continued...

With the information from the previous slide it shows that there is a 76% chance that the difference in Europe countries hosting as much as South American countries is 7.2 matches.

We reject the null hypothesis because it is negative

Since it was bluntly shown how significant the difference was between the 2 it was inevitable that Europe countries would host more matches



Over the years how many matches played incremented

Year	Hosts	Venues.Cities	Totalattendance..	Matches
1930	Uruguay	3/1	590,549	18
1934	Italy	8/8	363,000	17
1938	France	10/9	375,700	18
1950	Brazil	6/6	1,045,246	22
1954	Switzerland	6/6	768,607	26
1958	Sweden	12/12	819,810	35
1962	Chile	4/4	893,172	32
1966	England	8/7	1,563,135	32
1970	Mexico	5/5	1,603,975	32
1974	West Germany	9/9	1,865,753	38
1978	Argentina	6/5	1,545,791	38
1982	Spain	17/14	2,109,723	52
1986	Mexico	12/11	2,394,031	52
1990	Italy	12/12	2,516,215	52
1994	United States	9/9	3,587,538	52
1998	France	10/10	2,785,100	64
2002	South Korea Japan	20/20	2,705,197	64
2006	Germany	12/12	3,359,439	64
2010	South Africa	10/9	3,178,856	64
2014	Brazil	12/12	3,429,873	64
2018	Russia	12/11	3,031,768	64

In the data set we see that the world cup has been played 21 times over the past 80+ years.

We want to know if there has been changes to the game such as if there has been less matches played over the year or more due to popularity or rules changes.

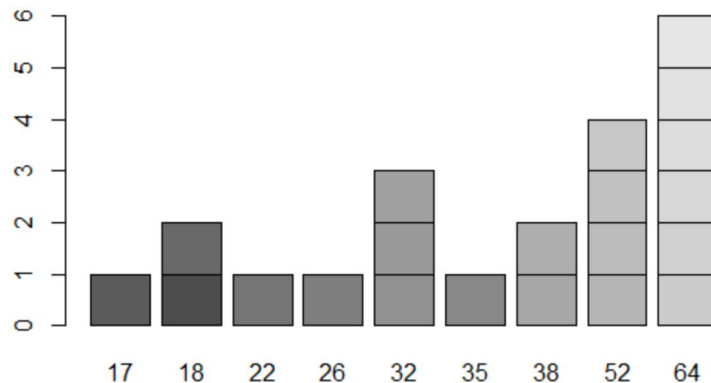


Visualisation Pt1

We see that the starting matches played in a world cup was 17 but the data shows that later on the federation were accustomed to playing 64 matches at the tournament.

R code

```
table(data_new1$Year, data_new1$Total Attendance..)
as.numeric(data_new1$Matches)
barplot(table(data_new1$Year, data_new1$Matches, xlab =
"Years", ylab="Percentage")
```



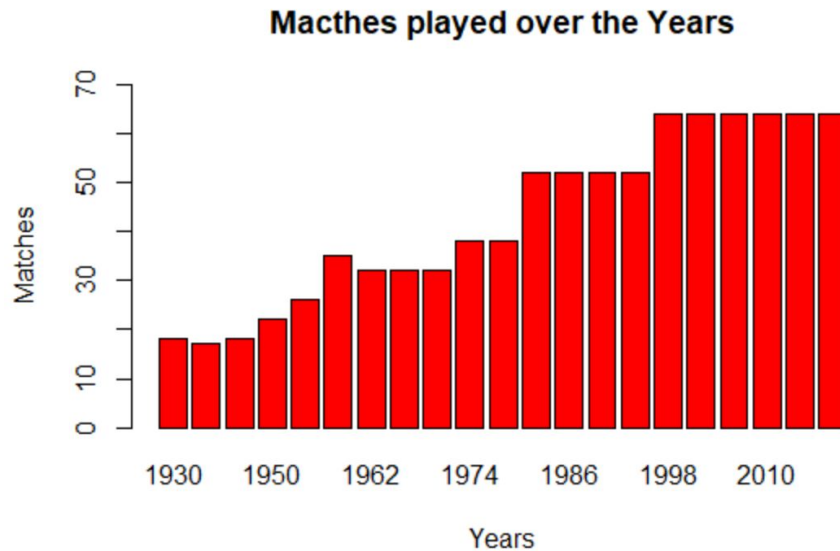
Visualisation Pt2

In this barplot we see what years hosted the amount of matches shown in the previous slide

This gives us more information on during what time period the matches started to increase in each tournament

R code

```
barplot(data_new1$Matches, names.arg =  
data_new1$Year, xlim = (1930,2018)  
        ylim=c(0,70), xlab = "Years", ylab = "Matches",  
        main= "Macthes played over the Years", col = "red")
```



Conclusion

We see that European countries have hosted the most world cups. This leads to believe that why each year the matches played in the tournament were rising was for the complete benefit of the European countries to get noticed from the television views.

