“Create a Tableau Story” Project: Baseball players performance

Summary:

The purpose of the visualization is to shows differences among the performance of the baseball players. I have shown the distribution of heights and weights of players is normal. I found that the higher the BMI of the player the better performance he got in terms of average batting and home runs. Also, Left handed players score more home runs than others while in average batting they have similar performance.

Design:

Here I will explain my design choices.

Prior design choices:

- I created a filter for Top N players to be used in terms of home runs and average batting.
- For the different measuring groups, I made all the aggregation measures to be (average) so it is not effected by volume of players in each group.
- I created a calculated field ‘BMI’ to accumulate for both height and weight of the player.
- I chose a bar chart for distributions because I want to investigate single variable with few points.
- I chose line chart to show proportionality of player’s BMI and batting average, and player’s BMI and home runs, because I want to show the relationship and trend between two numeric variables.
- I chose scatter plot to show **relationship** between two variables home runs and batting average. I added color to show how a third categorical variable (handedness) would contribute to data points placement. This helped to distinguish the relationship between the two variables for each category.
- I chose bar chart to **compare** the performance (average batting and home runs) between left, right and both handed players. It is easy to see who’s better by looking for the taller bar.
- I used bar chart for top N players since it is a comparison between nominals and I sorted the values by largest.

After feedback:

- I changed the line chart of BMI vs. batting and BMI vs. home runs by excluding some points that might add confusion.

- I formatted the average labels to show 2 decimal points.
- I edited some axis titles.
- I changed R,L,B of handedness to use full phase instead for better readability.

Feedback:

I asked a friend for feedback on first and final version. Here are my questions:

What do you notice in the visualization?

It is clear and I have understood the message you try to convoy. I like the diversity of the visualizations.

What questions do you have about the data?

No, nothing comes to my mind right now

What relationships do you notice?

How BMI contribute to players performance.

What do you think is the main takeaway from this visualization?

That the weight and height of the player might actually add to their performance. Also their handedness.

Is there something you don't understand in the graphic?

There is some notes:

- In the line chart of BMI vs batting and home runs when BMI is 20.5 values are zero? And nothing at 30 and 30.5?
- the averages of players by handedness is confusing and should be displayed better.
- R,L,B for handedness can be named better.

For the final version I altered my story based on these notes. Then showed it again to make sure everything is good now. And according to my friend it was :))

Resources:

for the top N filter :

https://kb.tableau.com/articles/howto/using-a-top-n-parameter-to-filter-a-table

First Version Workbook :

https://public.tableau.com/shared/92QTTYWFN?:display_count=yes

Final Version Workbook :

https://public.tableau.com/shared/88F8M3MMQ?:display_count=yes