

Biostat HW3

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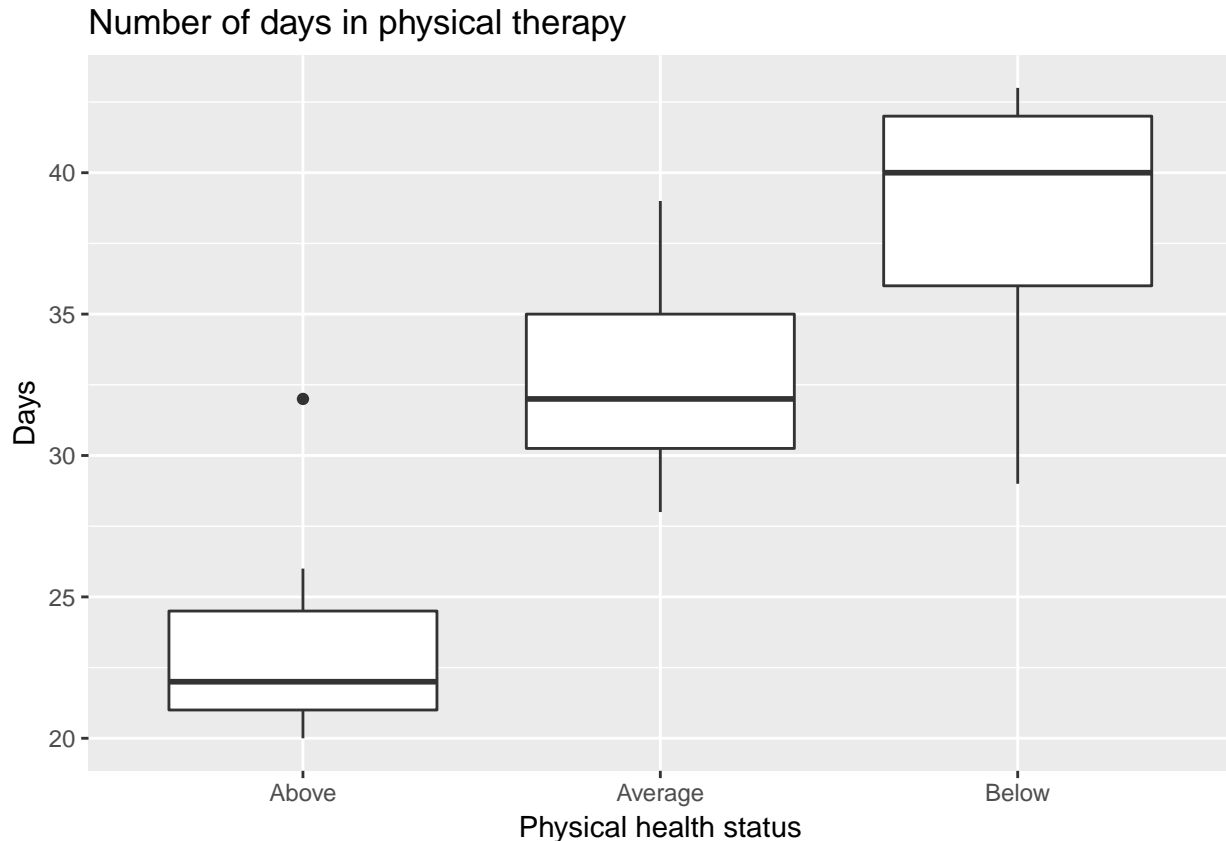
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Problem 3: A rehabilitation center is interested in examining the relationship between physical status before therapy and the time (days) required in physical therapy until successful rehabilitation. Records from patients 18-30 years old were collected and provided to you for statistical analysis (data “Knee.csv”).

1. Generate descriptive statistics for each group and comment on the differences observed

Table 1: Summary statistics across

Physical Health	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
Below	29	36.00	40	38.00000	42.0	43	2
Average	28	30.25	32	33.00000	35.0	39	NA
Above	20	21.00	22	23.57143	24.5	32	3



	Df	Sum Sq	Mean Sq	F value	Pr(>F)
factor(physical_status)	2	795.2457	397.62286	19.2802	1.45e-05
Residuals	22	453.7143	20.62338	NA	NA

```
##  
## Pairwise comparisons using t tests with pooled SD  
##  
## data:  knee_data$days and knee_data$physical_status  
##  
##      Above   Average  
## Average 0.0011  -  
## Below   1.1e-05 0.0898  
##  
## P value adjustment method: bonferroni
```