

# RWorksheet\_Barrientos#3b.Rmd

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2024-10-13

1.

A.

```
data <- data.frame(  
  Respondents = 1:20,  
  Sex = c(2, 1, 2, 2, 1, 1, 2, 2, 2, 1, 1, 2, 2, 1, 2, 2, 1, 2, 1, 2),  
  FatherOccupation = c(1, 2, 3, 1, 2, 1, 3, 2, 3, 3, 1, 3, 2, 1, 3, 1, 3, 3, 1, 1),  
  Persons_at_Home = c(5, 7, 3, 5, 5, 3, 6, 6, 7, 7, 3, 7, 4, 7, 8, 8, 3, 11, 8, 6),  
  Siblings_at_School = c(6, 4, 3, 2, 3, 3, 5, 5, 4, 5, 3, 7, 5, 2, 1, 3, 1, 5, 3, 2),  
  Types_of_Houses = c(1, 2, 3, 1, 3, 1, 3, 3, 3, 1, 3, 3, 3, 1, 3, 3, 3, 3, 3, 2)  
)  
data
```

##	Respondents	Sex	FatherOccupation	Persons_at_Home	Siblings_at_School	
## 1	1	2		1	5	6
## 2	2	1		2	7	4
## 3	3	2		3	3	3
## 4	4	2		1	5	2
## 5	5	1		2	5	3
## 6	6	1		1	3	3
## 7	7	2		3	6	5
## 8	8	2		2	6	5
## 9	9	2		3	7	4
## 10	10	1		3	7	5
## 11	11	1		1	3	3
## 12	12	2		3	7	7
## 13	13	2		2	4	5
## 14	14	1		1	7	2
## 15	15	2		3	8	1
## 16	16	2		1	8	3
## 17	17	1		3	3	1
## 18	18	2		3	11	5
## 19	19	1		1	8	3
## 20	20	2		1	6	2
##	Types_of_Houses					
## 1		1				
## 2		2				
## 3		3				
## 4		1				
## 5		3				
## 6		1				
## 7		3				
## 8		3				

```
## 9          3
## 10         1
## 11         3
## 12         3
## 13         3
## 14         1
## 15         3
## 16         3
## 17         3
## 18         3
## 19         3
## 20         2
```

B.

```
str(data)
```

```
## 'data.frame': 20 obs. of 6 variables:
## $ Respondents : int 1 2 3 4 5 6 7 8 9 10 ...
## $ Sex : num 2 1 2 2 1 1 2 2 2 1 ...
## $ FatherOccupation : num 1 2 3 1 2 1 3 2 3 3 ...
## $ Persons_at_Home : num 5 7 3 5 5 3 6 6 7 7 ...
## $ Siblings_at_School: num 6 4 3 2 3 3 5 5 4 5 ...
## $ Types_of_Houses : num 1 2 3 1 3 1 3 3 3 1 ...
```

```
summary(data)
```

```
## Respondents Sex FatherOccupation Persons_at_Home
## Min. : 1.00 Min. :1.0 Min. :1 Min. : 3.00
## 1st Qu.: 5.75 1st Qu.:1.0 1st Qu.:1 1st Qu.: 4.75
## Median :10.50 Median :2.0 Median :2 Median : 6.00
## Mean :10.50 Mean :1.6 Mean :2 Mean : 5.95
## 3rd Qu.:15.25 3rd Qu.:2.0 3rd Qu.:3 3rd Qu.: 7.00
## Max. :20.00 Max. :2.0 Max. :3 Max. :11.00
## Siblings_at_School Types_of_Houses
## Min. :1.00 Min. :1.00
## 1st Qu.:2.75 1st Qu.:1.75
## Median :3.00 Median :3.00
## Mean :3.60 Mean :2.40
## 3rd Qu.:5.00 3rd Qu.:3.00
## Max. :7.00 Max. :3.00
```

C.

```
mean(data$Siblings_at_School)
```

```
## [1] 3.6
```

D.

```
data[1:2, ]
```

```
## Respondents Sex FatherOccupation Persons_at_Home Siblings_at_School
## 1          1 2          1          5          6
## 2          2 1          2          7          4
## Types_of_Houses
## 1          1
## 2          2
```

E.

```
data[c(3, 5), c(2, 4)]
```

```
##      Sex Persons_at_Home
## 3      2                3
## 5      1                5
```

F.

```
types_houses <- data$Types_of_Houses
types_houses
```

```
## [1] 1 2 3 1 3 1 3 3 3 1 3 3 3 1 3 3 3 3 2
```

G.

```
Male_Farmers <- subset(data, Sex == 1 & FatherOccupation == 1)
Male_Farmers
```

```
##      Respondents Sex FatherOccupation Persons_at_Home Siblings_at_School
## 6                6 1                1                3                3
## 11               11 1                1                3                3
## 14               14 1                1                7                2
## 19               19 1                1                8                3
##      Types_of_Houses
## 6                    1
## 11                   3
## 14                    1
## 19                    3
```

H.

```
Female_Siblings <- subset(data, Sex == 2 & Siblings_at_School >= 5)
Female_Siblings
```

```
##      Respondents Sex FatherOccupation Persons_at_Home Siblings_at_School
## 1                1 2                1                5                6
## 7                7 2                3                6                5
## 8                8 2                2                6                5
## 12               12 2                3                7                7
## 13               13 2                2                4                5
## 18               18 2                3               11                5
##      Types_of_Houses
## 1                    1
## 7                    3
## 8                    3
## 12                   3
## 13                   3
## 18                   3
```

2.

A.

```
df = data.frame(Ints=integer(),
                Doubles=double(), Characters=character(),
                Logicals=logical(),
                Factors=factor(),
```

```
stringsAsFactors=FALSE)

print("Structure of the empty dataframe:")
```

```
## [1] "Structure of the empty dataframe:"
print(str(df))
```

```
## 'data.frame': 0 obs. of 5 variables:
## $ Ints : int
## $ Doubles : num
## $ Characters: chr
## $ Logicals : logi
## $ Factors : Factor w/ 0 levels:
## NULL
```

3.

A.

```
datac <- read.csv("HouseholdData.csv")
datac
```

```
## Respondents Sex FathersOccupation PersonsAtHome SiblingsAtSchool
## 1 1 Male 1 5 2
## 2 2 Female 2 7 3
## 3 3 Female 3 3 0
## 4 4 Male 3 8 5
## 5 5 Male 1 6 2
## 6 6 Female 2 4 3
## 7 7 Female 2 4 1
## 8 8 Male 3 2 2
## 9 9 Female 1 11 6
## 10 10 Male 3 6 2
## TypesOfHouses
## 1 Wood
## 2 Congrete
## 3 Congrete
## 4 wood
## 5 Semi-concrete
## 6 Semi-concrete
## 7 Wood
## 8 Semi-concrete
## 9 Semi-concrete
## 10 Congrete
```

B.

```
datac$Sex <- factor(datac$Sex, levels = c("Male", "Female"), labels = c(1,2))
datac
```

```
## Respondents Sex FathersOccupation PersonsAtHome SiblingsAtSchool
## 1 1 1 1 5 2
## 2 2 2 2 7 3
## 3 3 2 3 3 0
## 4 4 1 3 8 5
## 5 5 1 1 6 2
## 6 6 2 2 4 3
```

```
## 7      7 2      2      4      1
## 8      8 1      3      2      2
## 9      9 2      1     11      6
## 10     10 1      3      6      2
##      TypesOfHouses
## 1      Wood
## 2      Congrete
## 3      Congrete
## 4      wood
## 5      Semi-concrete
## 6      Semi-concrete
## 7      Wood
## 8      Semi-concrete
## 9      Semi-concrete
## 10     Congrete
```

C.

```
datac$TypesOfHouses <- factor(datac$TypesOfHouses, levels = c("Wood", "Congrete", "Semi-concrete"), lab
datac
```

```
##      Respondents Sex FathersOccupation PersonsAtHome SiblingsAtSchool
## 1      1 1      1      5      2
## 2      2 2      2      7      3
## 3      3 2      3      3      0
## 4      4 1      3      8      5
## 5      5 1      1      6      2
## 6      6 2      2      4      3
## 7      7 2      2      4      1
## 8      8 1      3      2      2
## 9      9 2      1     11      6
## 10     10 1      3      6      2
##      TypesOfHouses
## 1      1
## 2      2
## 3      2
## 4      <NA>
## 5      3
## 6      3
## 7      1
## 8      3
## 9      3
## 10     2
```

D.

```
datac$FathersOccupation <- factor(datac$FathersOccupation, levels = c(1,2,3), labels = c("Farmer", "Dri
datac
```

```
##      Respondents Sex FathersOccupation PersonsAtHome SiblingsAtSchool
## 1      1 1      Farmer      5      2
## 2      2 2      Driver      7      3
## 3      3 2      Others      3      0
## 4      4 1      Others      8      5
## 5      5 1      Farmer      6      2
## 6      6 2      Driver      4      3
## 7      7 2      Driver      4      1
```

```
## 8      8 1      Others      2      2
## 9      9 2      Farmer     11      6
## 10     10 1     Others      6      2
##      TypesOfHouses
## 1      1
## 2      2
## 3      2
## 4      <NA>
## 5      3
## 6      3
## 7      1
## 8      3
## 9      3
## 10     2
```

E.

```
FemaleDriverDad <- subset(datac, Sex == 2 & FathersOccupation == "Driver")
FemaleDriverDad
```

```
##      Respondents Sex FathersOccupation PersonsAtHome SiblingsAtSchool
## 2      2 2      Driver      7      3
## 6      6 2      Driver      4      3
## 7      7 2      Driver      4      1
##      TypesOfHouses
## 2      2
## 6      3
## 7      1
```

F.

```
manysiblings <- subset(datac, Respondents & SiblingsAtSchool >= 5)
manysiblings
```

```
##      Respondents Sex FathersOccupation PersonsAtHome SiblingsAtSchool
## 4      4 1      Others      8      5
## 9      9 2      Farmer     11      6
##      TypesOfHouses
## 4      <NA>
## 9      3
```

4. The graph shows the Sentiments Of Tweets Per Day, from July 14, 2020 to July 21, 2020. The red shows negative, orange shows neutral, and blue shows a positive. As the graph shows that the negative tweets is the highest of the all.