

# Mental Accounting in College: Students and 'Free Money'

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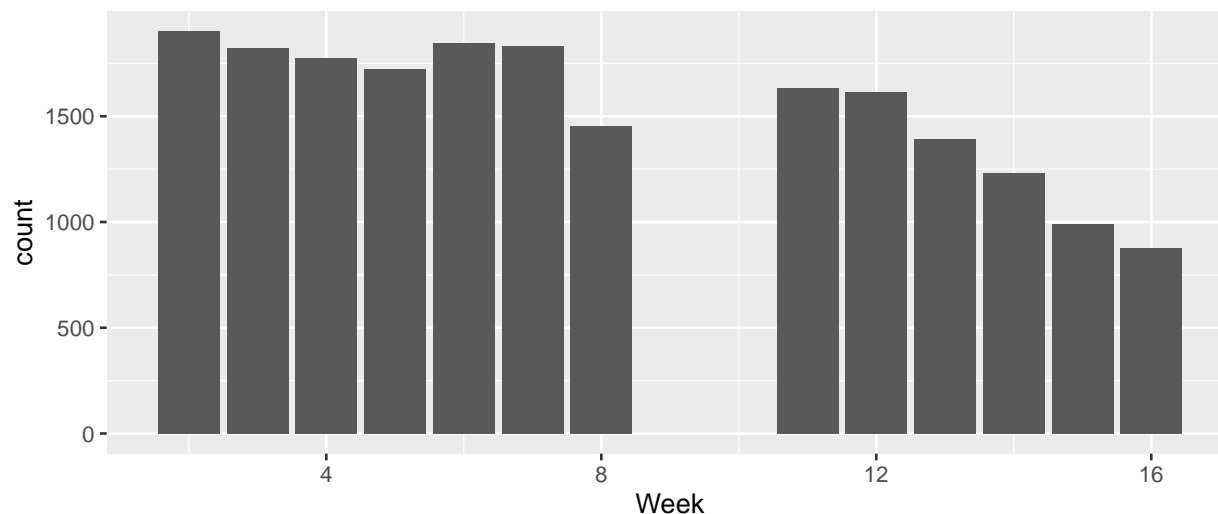
*Spring Semester Dates* Campus Open: 1/20/19, Start: 1/22/19, End: 5/8/19, Campus Closed: 5/20/19

*Fall Semester Dates* Campus Open: 8/31/19 Start: 9/3/19, End: 12/11/19, Campus Closed: 12/21/19

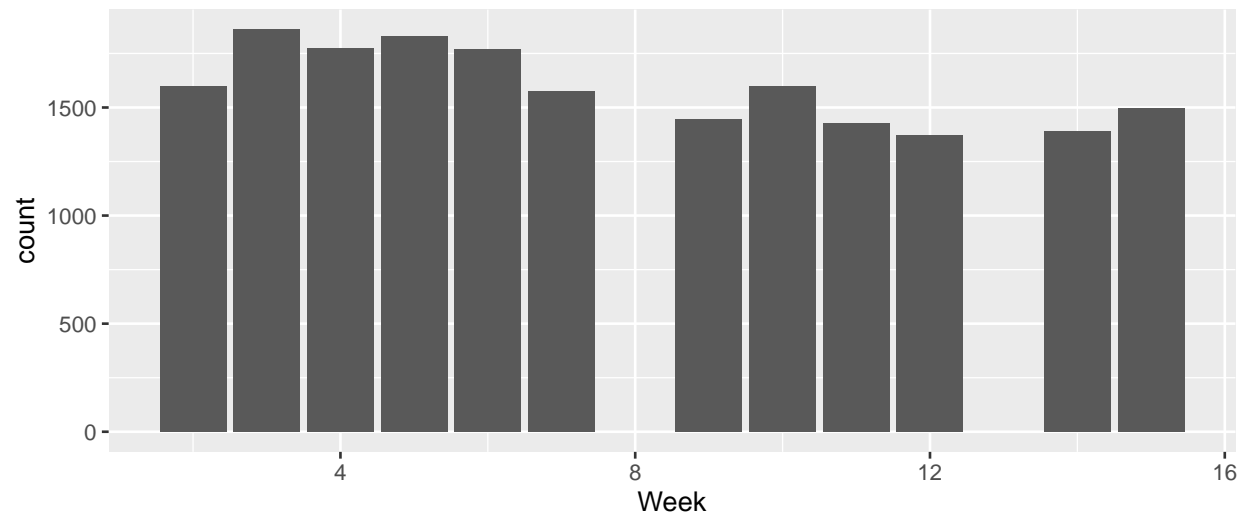
```
flex_data <- read_csv("flex_data.csv")
flex_data <- flex_data %>% mutate(Time = mdy_hm(Time)) %>% mutate(Week = epiweek(Time)) %>% rename(AmountSpent = AmountSpent)
flex_data <- flex_data %>% filter(Time >= '2019-01-20' & Time <= '2019-12-19') %>% filter(AmountSpent > 0)
```

```
#Transactions by week
springtrans <- flex_data %>% filter(Time <= '2019-5-19') %>% mutate(Week = Week-3) %>% filter(Week!=1 & Week!=2)
falltrans <- flex_data %>% filter(Time >= '2019-9-1') %>% mutate(Week = Week-35) %>% filter(Week!=1 & Week!=2)

ggplot(springtrans) + geom_bar(aes(x=Week))
```

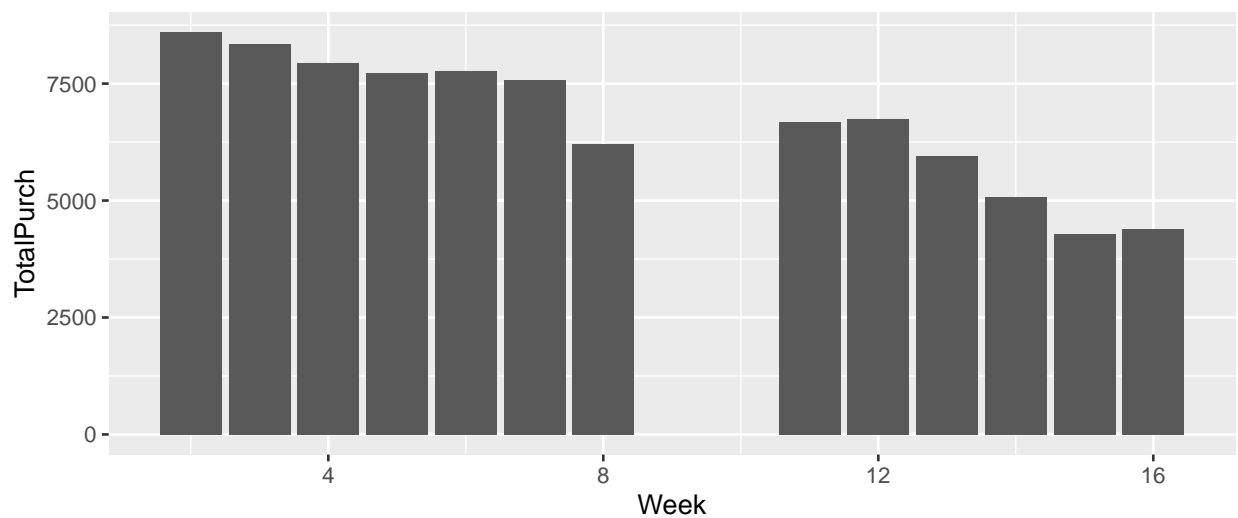


```
ggplot(falltrans) + geom_bar(aes(x=Week))
```

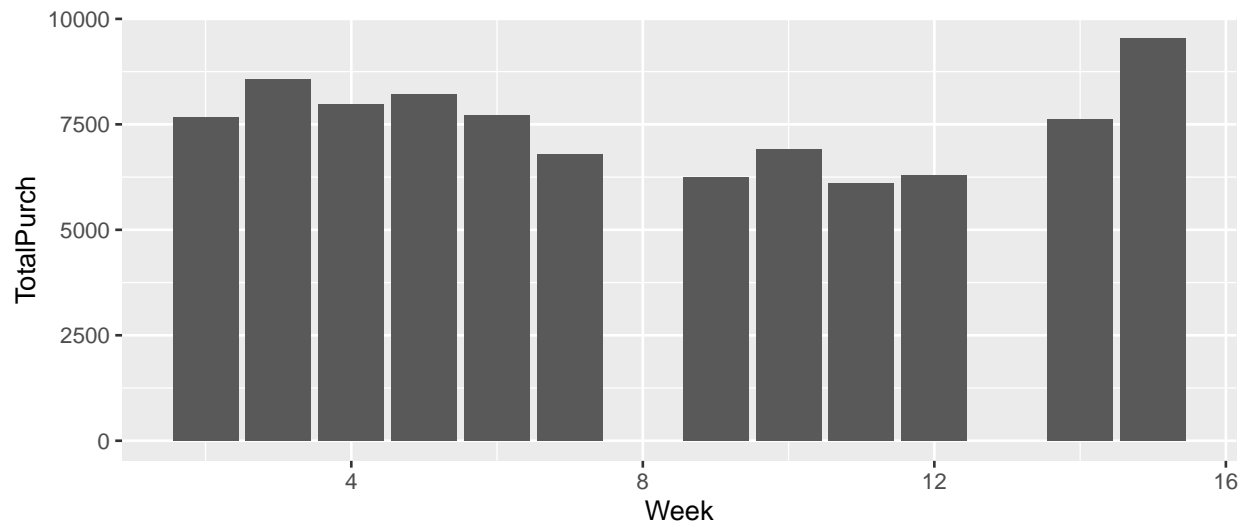


```
#Purchases by week
springpurch <- springtrans %>% group_by(Week) %>% summarize(TotalPurch = sum(AmountSpent))
fallpurch <- falltrans %>% group_by(Week) %>% summarize(TotalPurch = sum(AmountSpent))

ggplot(springpurch) + geom_bar(aes(x=Week, y=TotalPurch), stat='identity')
```



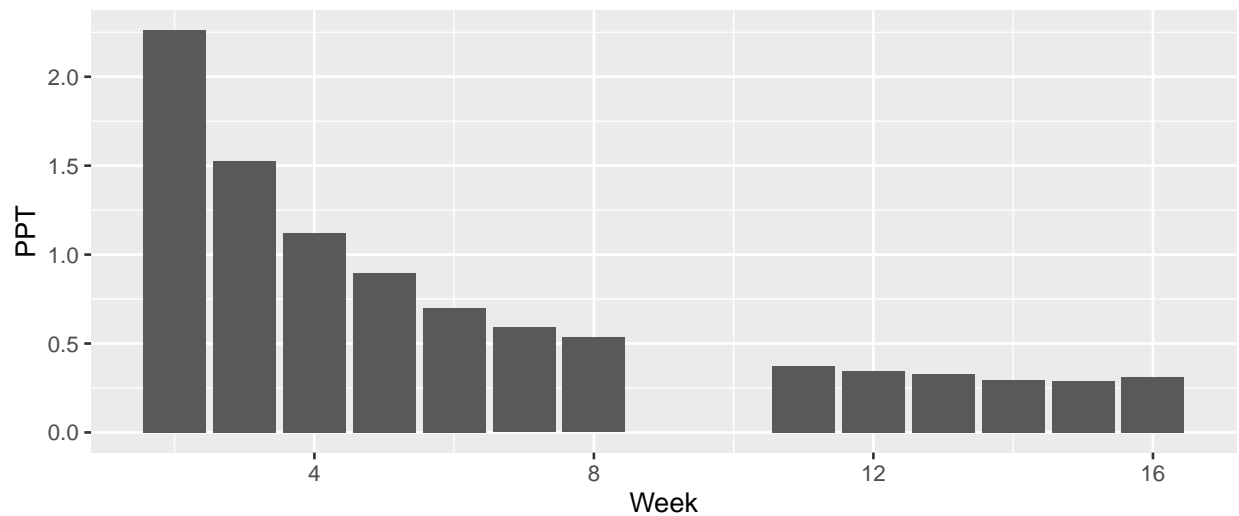
```
ggplot(fallpurch) + geom_bar(aes(x=Week, y=TotalPurch), stat='identity')
```



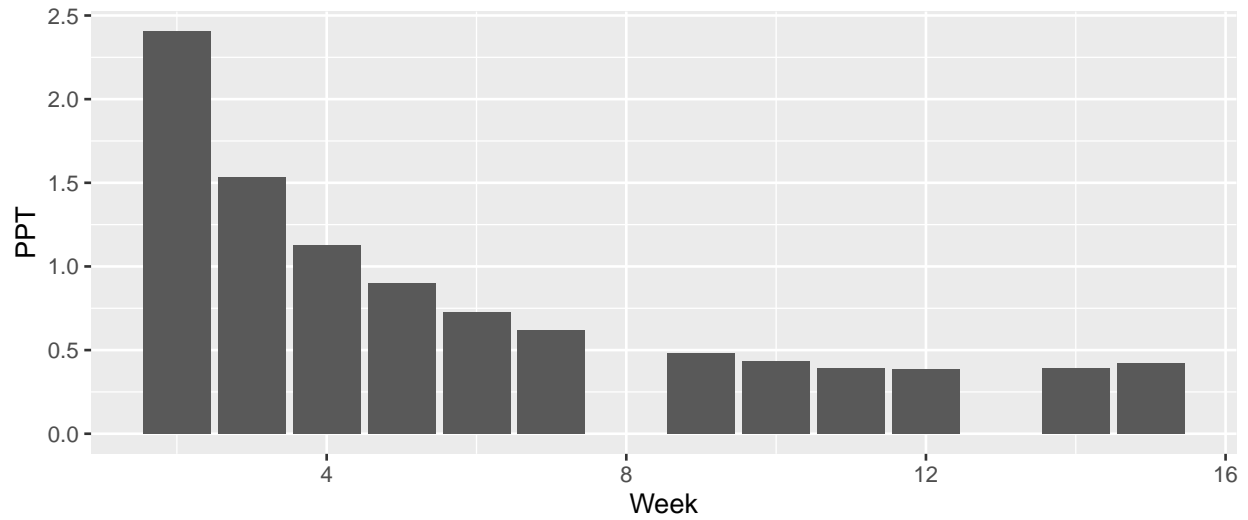
*#Amount Spent Per Transaction*

```
springppt <- springtrans %>% group_by(Week) %>% summarize(TotalTrans = sum(as.double(Week)), TotalPurch = sum(PPT))
fallppt <- falltrans %>% group_by(Week) %>% summarize(TotalTrans = sum(as.double(Week)), TotalPurch = sum(PPT))
```

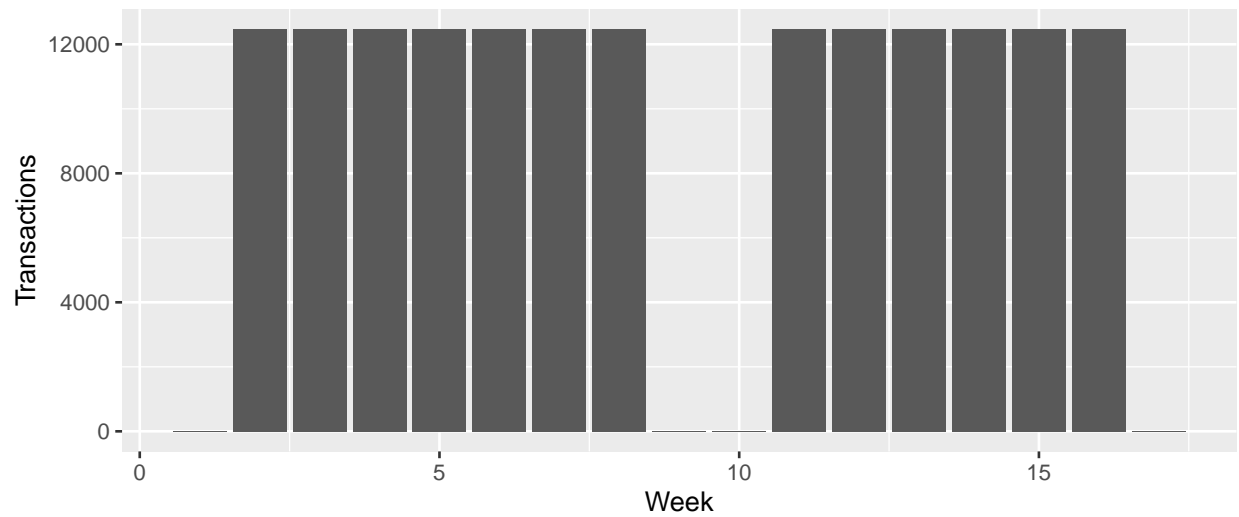
```
ggplot(springppt) + geom_bar(aes(x=Week, y=PPT), stat='identity')
```



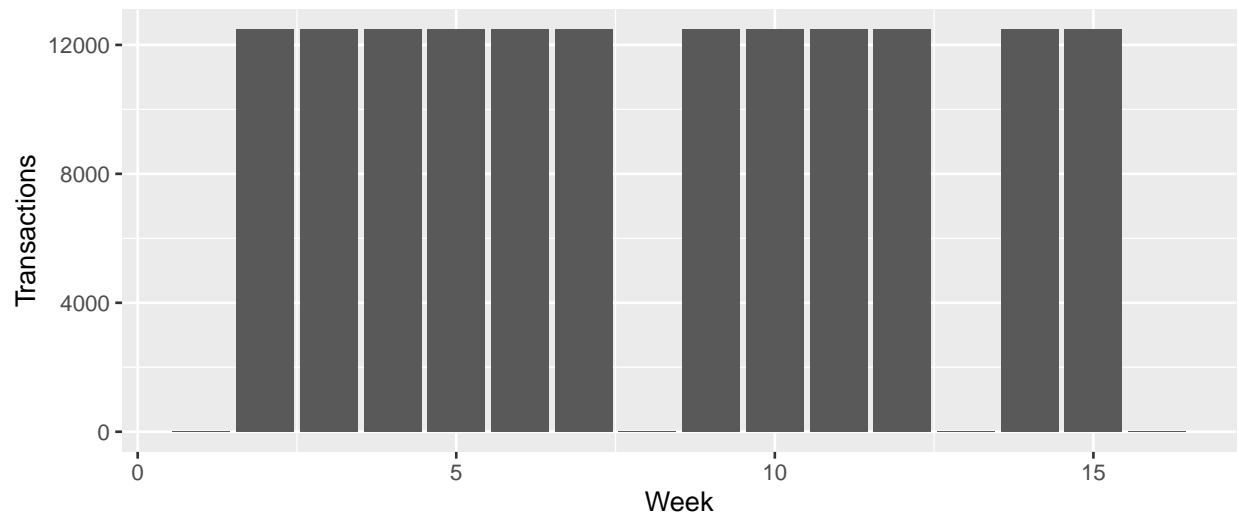
```
ggplot(fallppt) + geom_bar(aes(x=Week, y=PPT), stat='identity')
```



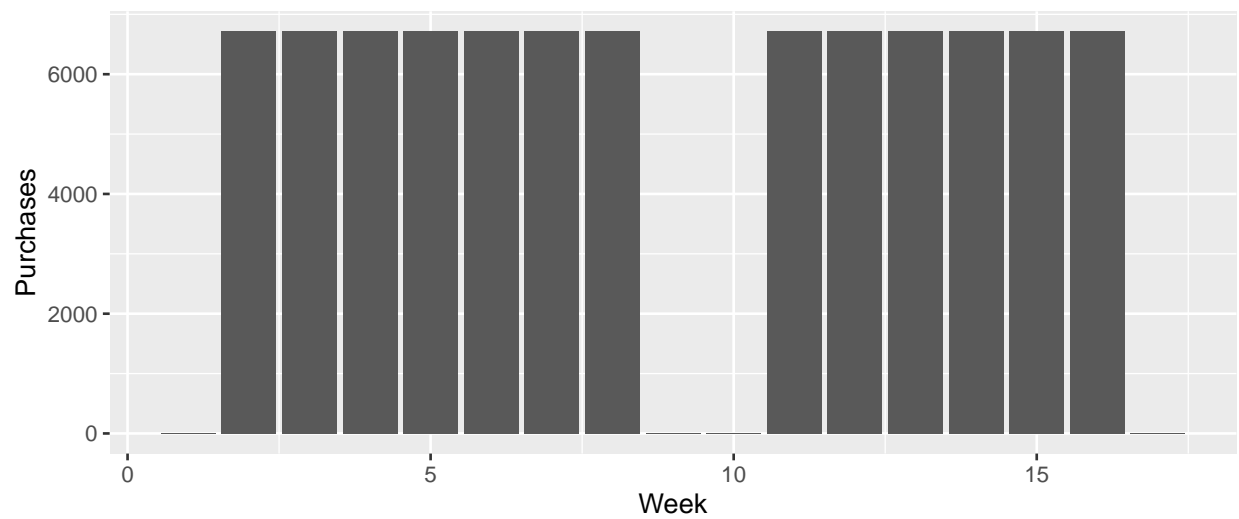
```
#Creation of null dataframes
sprnnullconsistent <- data.frame("Week"=1:17, "Transactions"= c(0,sum(springppt$TotalTrans)/13,sum(springppt$TotalTrans)/13))
fallnullconsistent <- data.frame("Week"=1:16, "Transactions"= c(0,sum(fallppt$TotalTrans)/12,sum(fallppt$TotalTrans)/12))
ggplot(sprnnullconsistent) + geom_bar(aes(x=Week, y=Transactions), stat='identity')
```



```
ggplot(fallnullconsistent) + geom_bar(aes(x=Week, y=Transactions), stat='identity')
```



```
ggplot(sprnullconsistent) + geom_bar(aes(x=Week, y=Purchases), stat='identity')
```



```
ggplot(fallnullconsistent) + geom_bar(aes(x=Week, y=Purchases), stat='identity')
```

