

## Sentiment in R

```
v <- read_rds('data/vyvanse.rds')
s <- read_rds('data/Stratteraoral.rds')
a1 <- read_rds('data/Adderall-oral.rds')
a2 <- read_rds('data/Adderallxroral.rds')

a <- a1 %>%
  bind_rows(a2)

tidy.v <- v %>%
  unnest_tokens(word, comment)

tidy.s <- s %>%
  unnest_tokens(word, comment)

tidy.a <- a %>%
  unnest_tokens(word, comment)

install.packages("textdata")

## Installing package into '/home/jovyan/.rsm-msba/R/x86_64-pc-linux-gnu-library/3.6'
## (as 'lib' is unspecified)

library(textdata)

nrc <- get_sentiments("nrc")

v.sentiment <- tidy.v %>%
  inner_join(nrc, by = c("word"))

s.sentiment <- tidy.s %>%
  inner_join(nrc, by = c("word"))

a.sentiment <- tidy.a %>%
  inner_join(nrc, by = c("word"))

v.sentiment <- v.sentiment %>%
  mutate(Drug_Name = "VYVANSE")

s.sentiment <- s.sentiment %>%
  mutate(Drug_Name = "STRATTERAORAL")

a.sentiment <- a.sentiment %>%
  mutate(Drug_Name = "ADDERALL")

names(v.sentiment)

## [1] "reviewer"      "Ease.of.Use"   "Effectiveness" "Satisfaction"
## [5] "condition"     "date"          "helpful"       "word"
## [9] "sentiment"     "Drug_Name"
```

```

vl.sentiment <- v.sentiment %>%
  group_by(sentiment, Drug_Name) %>%
  summarise(count = n())

sl.sentiment <- s.sentiment %>%
  group_by(sentiment, Drug_Name) %>%
  summarise(count = n())

al.sentiment <- a.sentiment %>%
  group_by(sentiment, Drug_Name) %>%
  summarise(count = n())

gl <- vl.sentiment %>%
  bind_rows(sl.sentiment) %>%
  bind_rows(al.sentiment)

install.packages("xlsx")

## Installing package into '/home/jovyan/.rsm-msba/R/x86_64-pc-linux-gnu-library/3.6'
## (as 'lib' is unspecified)

library(xlsx)

gl

## # A tibble: 30 x 3
## # Groups:   sentiment [10]
##   sentiment    Drug_Name count
##   <chr>        <chr>    <int>
## 1 anger        VYVANSE    1603
## 2 anticipation VYVANSE    2612
## 3 disgust      VYVANSE    1154
## 4 fear         VYVANSE    2180
## 5 joy          VYVANSE    1941
## 6 negative      VYVANSE    3935
## 7 positive      VYVANSE    4957
## 8 sadness       VYVANSE    2283
## 9 surprise      VYVANSE    1303
## 10 trust        VYVANSE    2994
## # ... with 20 more rows

```