Plot

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```
library(tidyverse)
```

```
## -- Attaching packages --------------------------------------- tidyverse 1.3.1 --
```

```
## v ggplot2 3.3.5     v purrr   0.3.4
## v tibble  3.1.5     v dplyr   1.0.7
## v tidyr   1.1.4     v stringr 1.4.0
## v readr   2.0.2     v forcats 0.5.1
```

```
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
library(readxl)
df <- read_excel("YAR_boxplots_Expenditures_Final_version.xlsx")
unique(df$variable)
```

```
##  [1] "-\tOther significant expenses (>10% of monthly income)"
##  [2] "Outside food (snacks, soft drinks, sweets)"
##  [3] "Food at home"
##  [4] "Clothing and shoes"
##  [5] "Transportation (including fuel)"
##  [6] "House/rent"
##  [7] "School expenses"
##  [8] "Mobile phone, street phone"
##  [9] "cigarettes"
## [10] "Water charges"
## [11] "Electricity charges/charging phones/kerosene/energy/firewood"
## [12] "Toiletries"
## [13] "School fees"
## [14] "Alcoholic beverages"
```

```
remove <- c("-\tOther significant expenses (>10% of monthly income)","House/rent","cigarettes","Water cl

df <- df %>% filter(!variable %in% remove)
```

```
library(ggthemes)
```

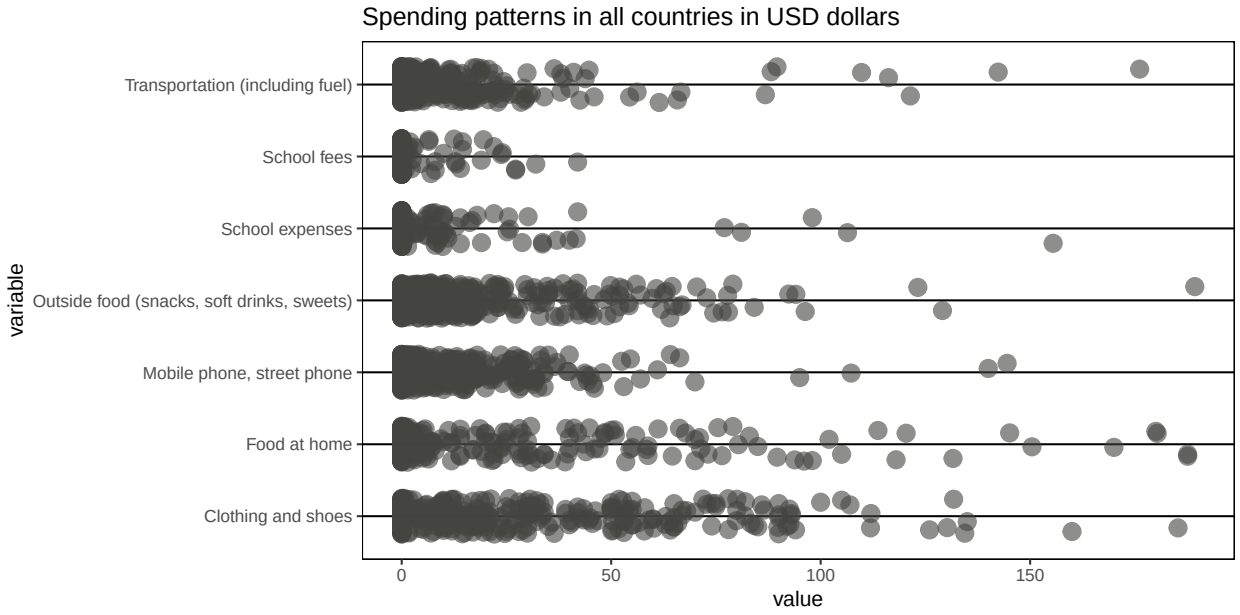
```
## Warning: package 'ggthemes' was built under R version 4.1.2
```

```
df %>% head()
```

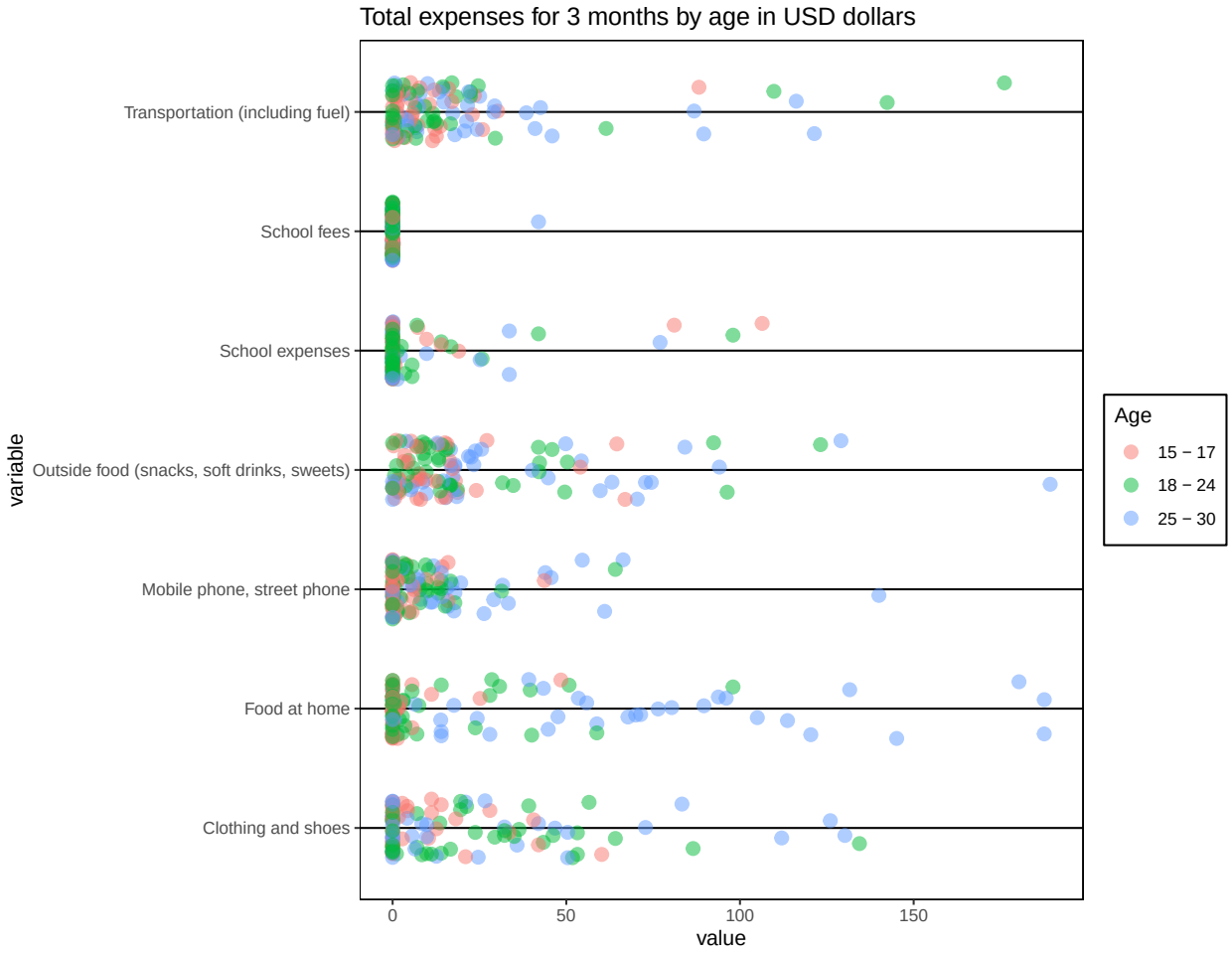
```
## # A tibble: 6 x 5
##   Country Gender Age     variable                                    value
##   <chr>   <chr>  <chr>   <chr>                                       <dbl>
## 1 Nigeria Male   25 - 30 Outside food (snacks, soft drinks, sweets)  189.
```

```
## 2 Nigeria Male   25 - 30 Food at home                                188.
## 3 Nigeria Female 25 - 30 Food at home                                188.
## 4 Senegal Female 25 - 30 Clothing and shoes                          185.
## 5 Nigeria Female 25 - 30 Food at home                                180.
## 6 Morocco Female 18 - 24 Food at home                                180
```

```
df %>% ggplot(aes(x = variable,y = value))+geom_jitter(size =4,color = "#444541",width=0.25,alpha=0.6)+
  labs(title = "Spending patterns in all countries in USD dollars")+theme_excel()+ theme(panel.backgrou
```




```
colors = c("#f5ef42","#428df5","#42e3f5","#4b4f4f","#c7c9c9","#cbe39d")
df %>%filter(Country== "Nigeria",
             Age != "NA") %>%drop_na() %>%
  ggplot(aes(x = variable,y = value))+geom_jitter(width=0.25,size = 3,alpha = 0.5,aes(color = Age))+coo
  labs(title = "Total expenses for 3 months by age in USD dollars")+theme_excel()+
  theme(panel.background = element_blank())
```




```
  scale_fill_manual(values = colors)
```

```
## <ggproto object: Class ScaleDiscrete, Scale, gg>
##     aesthetics: fill
##     axis_order: function
##     break_info: function
##     break_positions: function
##     breaks: waiver
##     call: call
##     clone: function
##     dimension: function
##     drop: TRUE
##     expand: waiver
##     get_breaks: function
##     get_breaks_minor: function
##     get_labels: function
##     get_limits: function
##     guide: legend
##     is_discrete: function
##     is_empty: function
##     labels: waiver
##     limits: NULL
##     make_sec_title: function
```

```
##     make_title: function
##     map: function
##     map_df: function
##     n.breaks.cache: NULL
##     na.translate: TRUE
##     na.value: grey50
##     name: waiver
##     palette: function
##     palette.cache: NULL
##     position: left
##     range: <ggproto object: Class RangeDiscrete, Range, gg>
##         range: NULL
##         reset: function
##         train: function
##         super:  <ggproto object: Class RangeDiscrete, Range, gg>
##     rescale: function
##     reset: function
##     scale_name: manual
##     train: function
##     train_df: function
##     transform: function
##     transform_df: function
##     super:  <ggproto object: Class ScaleDiscrete, Scale, gg>
```