

Data_Analysis_OSC

Aarthi Ravi

08/06/2021

Contents

1 Descriptives/ Preliminary Analyses	3
2 Filter	4

```
require("knitr")
```

```
## Loading required package: knitr
```

```
knitr::opts_chunk$set(echo = TRUE)
knitr::opts_chunk$set(tidy.opts=list(width.cutoff=50),tidy=TRUE)
```

```
library(data.table)
library(tidyverse)
```

```
## -- Attaching packages ----- tidyverse 1.3.0 --
```

```
## v ggplot2 3.3.3      v purrr  0.3.4
## v tibble  3.1.0      v dplyr  1.0.5
## v tidyr   1.1.3      v stringr 1.4.0
## v readr   1.4.0      v forcats 0.5.1
```

```
## -- Conflicts ----- tidyverse_conflicts() --
```

```
## x dplyr::between() masks data.table::between()
## x dplyr::filter()  masks stats::filter()
## x dplyr::first()   masks data.table::first()
## x dplyr::lag()      masks stats::lag()
## x dplyr::last()    masks data.table::last()
## x purrr::transpose() masks data.table::transpose()
```

```
library(magrittr)
```

```
##
```

```
## Attaching package: 'magrittr'
```

```
## The following object is masked from 'package:purrr':
```

```
##
```

```
##      set_names
```

```
## The following object is masked from 'package:tidyr':  
##  
##   extract
```

```
library(lavaan)
```

```
## This is lavaan 0.6-8  
## lavaan is FREE software! Please report any bugs.
```

```
library(car)
```

```
## Loading required package: carData
```

```
##  
## Attaching package: 'car'
```

```
## The following object is masked from 'package:dplyr':  
##  
##   recode
```

```
## The following object is masked from 'package:purrr':  
##  
##   some
```

```
library(tidySEM)
```

```
## Registered S3 methods overwritten by 'tidySEM':  
##   method      from  
##   print.mplus.model  MplusAutomation  
##   print.mplusObject  MplusAutomation  
##   summary.mplus.model MplusAutomation
```

```
library(gridExtra)
```

```
##  
## Attaching package: 'gridExtra'
```

```
## The following object is masked from 'package:dplyr':  
##  
##   combine
```

```
library(equatiomatic)  
library(psych)
```

```
##  
## Attaching package: 'psych'
```

```
## The following object is masked from 'package:car':  
##  
##   logit
```

```
## The following object is masked from 'package:lavaan':
##
##      cor2cov

## The following objects are masked from 'package:ggplot2':
##
##      %+%, alpha
```

```
library(gridExtra)
```

1 Descriptives/ Preliminary Analyses

```
data <- read.csv ("OSC_data.csv")
data1 <- select (data, ID, AGE,GENDER,BIRTH_EXP,PSYC_DIS,COG_DIS, DIS, PLAY_GAME)
View (data1)
summary (data1)
```

```
##      ID          AGE          GENDER          BIRTH_EXP
## Min.   : 1.00   Min.   : 6.000   Length:354   Length:354
## 1st Qu.: 91.25   1st Qu.: 8.000   Class :character   Class :character
## Median :184.50   Median :10.000   Mode  :character   Mode  :character
## Mean   :185.38   Mean    : 9.952
## 3rd Qu.:278.75   3rd Qu.:11.000
## Max.    :367.00   Max.    :17.000
##      PSYC_DIS      COG_DIS          DIS          PLAY_GAME
## Length:354      Length:354      Length:354      Length:354
## Class :character   Class :character   Class :character   Class :character
## Mode  :character   Mode  :character   Mode  :character   Mode  :character
##
##
##
```

```
describe (data1)
```

```
##      vars    n   mean    sd median trimmed   mad min max range skew
## ID          1 354 185.38 106.73  184.5  185.63 139.36   1 367  366 -0.02
## AGE          2 354   9.95   2.29   10.0    9.82   1.48   6  17   11  0.52
## GENDER*       3 354   3.40   1.11    3.5    3.38   0.74   1   5    4  0.01
## BIRTH_EXP*    4 354   2.50   0.87    3.0    2.62   0.00   1   3    2 -1.15
## PSYC_DIS*     5 354   1.04   0.20    1.0    1.00   0.00   1   2    1  4.71
## COG_DIS*      6 354   1.17   0.56    1.0    1.00   0.00   1   3    2  2.94
## DIS*          7 354   1.11   0.31    1.0    1.01   0.00   1   2    1  2.48
## PLAY_GAME*    8 354   1.94   0.25    2.0    2.00   0.00   1   2    1 -3.52
##      kurtosis    se
## ID          -1.22 5.67
## AGE           0.02 0.12
## GENDER*      -1.33 0.06
## BIRTH_EXP*   -0.67 0.05
## PSYC_DIS*    20.20 0.01
```

```
## COG_DIS*      6.67 0.03
## DIS*          4.16 0.02
## PLAY_GAME*   10.38 0.01
```

```
d1 <- filter (data1, AGE < 9 )
d2 <- filter (data1, (AGE<12 & AGE>8))
d3 <- filter (data1, AGE>11)
d4 <- filter (data1, GENDER == "male")
d5 <- filter (data1, GENDER == "female")
d6 <- filter (data1, BIRTH_EXP == "V")
d7 <- filter (data1, BIRTH_EXP == "C")
d8 <- filter (data1, PSYC_DIS == "Y")
d9 <- filter (data1, COG_DIS == "Y")
d10 <- filter (data1, DIS == "Y")
d11 <- filter (data1, PLAY_GAME == "Y")

number_group <- c(nrow(d1),nrow(d2),nrow(d3),nrow(d4),nrow(d5),nrow(d6),nrow(d7),
                  nrow(d8),nrow(d9),nrow(d10),nrow(d11))
part_demographics <- data.frame(cbind(nrow(d1),nrow(d2),nrow(d3),nrow(d4),nrow(d5),nrow(d6),nrow(d7),nrow(d8),nrow(d9),nrow(d10),nrow(d11)))
names (part_demographics) <- c("Age_Group1 (6 to 8 yrs)", "Age_Group2 (9 to 11 yrs)", "Age_Group3 (12 to 14 yrs)", "Gender", "C-Game", "M-Game", "V-Game", "C-PSYC", "C-DIG", "C-GEN", "C-MIS", "C-VIDEO", "C-GAMEPLAY")
kable (part_demographics)
```

Age_Group1 (6 to 8 yrs)	Age_Group2 (9 to 11 yrs)	Age_Group3 (12 to 14 yrs)	Gender	C-Game	M-Game	V-Game	C-PSYC	C-DIG	C-GEN	C-MIS	C-VIDEO	C-GAMEPLAY
102	178	74	107	102	265	88	14	30	39	331		

2 Filter

Age groups (3) F M V C PSY COG DIS Game