Data Cleaning of Peru 5 and Peru 6 Data with preprocessed data

Daniela Munoz Lopez

2024-07-25

```
#clear environment (RUN EACH TIME SCRIPT IS OPENED)
rm(list = ls())
```

#Load Packages

```
#Load in packages that will be used throughout the markdown.
packages <- c("tidyverse",
              "summarytools",
              "psych",
              "reader",
              "tidyr",
              "lme4",
              "lmerTest",
              "jtools",
              "interactions",
              "rio",
              "ggplot2",
              "dplyr",
              "here")
#invisible(lapply(packages, install.packages, character.only = TRUE)) #install packages (only run once)
invisible(lapply(packages, library, character.only = TRUE)) #load the packages
```

```
## -- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --
## v dplyr     1.1.4     v readr     2.1.5
## v forcats   1.0.0     v stringr   1.5.1
## v ggplot2   3.5.1     v tibble    3.2.1
## v lubridate 1.9.3     v tidyr     1.3.1
## v purrr     1.0.2
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
##
## Attaching package: 'summarytools'
##
##
## The following object is masked from 'package:tibble':
##
##     view
##
##
##
## Attaching package: 'psych'
##
```

```
##
## The following objects are masked from 'package:ggplot2':
##
##     %+%, alpha
##
##
## Loading required package: NCmisc
##
##
## Attaching package: 'reader'
##
##
## The following objects are masked from 'package:NCmisc':
##
##     cat.path, get.ext, rmv.ext
##
##
## Loading required package: Matrix
##
##
## Attaching package: 'Matrix'
##
##
## The following objects are masked from 'package:tidyr':
##
##     expand, pack, unpack
##
##
##
## Attaching package: 'lmerTest'
##
##
## The following object is masked from 'package:lme4':
##
##     lmer
##
##
## The following object is masked from 'package:stats':
##
##     step
##
##
##
## Attaching package: 'jtools'
##
##
## The following object is masked from 'package:NCmisc':
##
##     standardize
##
##
##
## Attaching package: 'rio'
##
```

```
##
## The following object is masked from 'package:lme4':
##
##     factorize
##
##
## here() starts at /Users/dannymunozlopez/Library/CloudStorage/OneDrive-UW/Documents - interACT Lab/pr
```

#Load All Peru Data

```
#load Peru data.
data_dir = dirname(dirname(here())) #Move out of "digitalstress_p5_p6" folder to the "Peru May 2019" fo

wave_folder <- "peru6" #Name of the wave folder containing all Peru 6 data.

data_folder <- file.path(data_dir, "Waves", wave_folder, "projects",
                         "data_prep", "data", "derivatives") #Path to the data within the wave_folder

file_name <- "peru56_DSS_PROMIS_(PSS)_RT_2023Jan25.csv" #Name of the CSV containing the data that was p

peru6 <- read.csv(here(data_folder,file_name), header = T, sep = ",", na.strings=c("", " ","NA")) #Load

as_tibble(peru6) #Convert the data frame into a tibble with class tbl_df
```

```
## # A tibble: 1,564 x 75
##    Peru3_4_5_6_ID wave   Peru3_4_5_ID Peru3_4_ID wave_ID peru3_4_5_6matchfactor
##    <chr>          <chr>  <chr>        <lgl>      <chr>   <chr>
##  1 3_4_5_6_1004   Peru 5 3_4_5_23198  NA         5_3835  DNI
##  2 3_4_5_6_1004   Peru 6 <NA>         NA         6_648   DNI
##  3 3_4_5_6_1016   Peru 5 3_4_5_23200  NA         5_3841  DNI
##  4 3_4_5_6_1016   Peru 6 <NA>         NA         6_658   DNI
##  5 3_4_5_6_1020   Peru 5 3_4_5_1110   NA         5_3844  DNI
##  6 3_4_5_6_1020   Peru 6 <NA>         NA         6_661   DNI
##  7 3_4_5_6_1022   Peru 5 3_4_5_1113   NA         5_3845  DNI
##  8 3_4_5_6_1022   Peru 6 <NA>         NA         6_662   DNI
##  9 3_4_5_6_1035   Peru 5 3_4_5_23201  NA         5_3850  DNI
## 10 3_4_5_6_1035   Peru 6 <NA>         NA         6_672   DNI
## # i 1,554 more rows
## # i 69 more variables: peru3_4_5matchfactor <chr>, peru3_4matchfactor <lgl>,
## #   wave_matchfactor <chr>, group <chr>, session <chr>, exclude <chr>,
## #   startdate <chr>, startdate_formatted <chr>, duplicate <chr>, enddate <lgl>,
## #   status <lgl>, progress <lgl>, duration <lgl>, finished <lgl>,
## #   distribution <chr>, ballotbox <lgl>, gender <chr>, birthmth <int>,
## #   birthyr <int>, age_selfreport <dbl>, grade_2020 <int>, ...
```

```
#Select only the data collected during Peru 5 and Peru 6
peru5_6 <- peru6 %>%
  filter(wave== 'Peru 5' | wave == 'Peru 6')

nrow(peru5_6) #Count rows of Peru 5 and Peru 6. N = 1,564
```

```
## [1] 1564
```

```
#check data
head(peru5_6, 20)
```

```
##    Peru3_4_5_6_ID   wave Peru3_4_5_ID Peru3_4_ID wave_ID peru3_4_5_6matchfactor
```

```
## 1    3_4_5_6_1004 Peru 5  3_4_5_23198        NA  5_3835                  DNI
## 2    3_4_5_6_1004 Peru 6         <NA>        NA   6_648                  DNI
## 3    3_4_5_6_1016 Peru 5  3_4_5_23200        NA  5_3841                  DNI
## 4    3_4_5_6_1016 Peru 6         <NA>        NA   6_658                  DNI
## 5    3_4_5_6_1020 Peru 5   3_4_5_1110        NA  5_3844                  DNI
## 6    3_4_5_6_1020 Peru 6         <NA>        NA   6_661                  DNI
## 7    3_4_5_6_1022 Peru 5   3_4_5_1113        NA  5_3845                  DNI
## 8    3_4_5_6_1022 Peru 6         <NA>        NA   6_662                  DNI
## 9    3_4_5_6_1035 Peru 5  3_4_5_23201        NA  5_3850                  DNI
## 10   3_4_5_6_1035 Peru 6         <NA>        NA   6_672                  DNI
## 11   3_4_5_6_1039 Peru 5   3_4_5_1130        NA  5_3852                  DNI
## 12   3_4_5_6_1039 Peru 6         <NA>        NA   6_673                  DNI
## 13    3_4_5_6_104 Peru 5    3_4_5_102        NA  5_3469                  DNI
## 14    3_4_5_6_104 Peru 6         <NA>        NA    6_91                  DNI
## 15   3_4_5_6_1040 Peru 5   3_4_5_1132        NA  5_6295                  DNI
## 16   3_4_5_6_1040 Peru 6         <NA>        NA   6_674                  DNI
## 17   3_4_5_6_1055 Peru 5   3_4_5_1143        NA  5_3858                  DNI
## 18   3_4_5_6_1055 Peru 6         <NA>        NA   6_685                  DNI
## 19   3_4_5_6_1056 Peru 5  3_4_5_23202        NA  5_3859                  DNI
## 20   3_4_5_6_1056 Peru 6         <NA>        NA   6_686                  DNI
##    peru3_4_5matchfactor peru3_4matchfactor wave_matchfactor  group      session
## 1                  <NA>                NA              DNI Group3 survey3_6a11
## 2                  <NA>                NA              DNI Group3 survey3_6a11
## 3                  <NA>                NA              DNI Group3 survey3_6a11
## 4                  <NA>                NA              DNI Group3 survey3_6a11
## 5                   DNI                NA              DNI Group3 survey3_6a11
## 6                  <NA>                NA              DNI Group3 survey3_6a11
## 7                   DNI                NA              DNI Group3 survey3_6a11
## 8                  <NA>                NA              DNI Group3 survey3_6a11
## 9                  <NA>                NA              DNI Group3 survey3_6a11
## 10                 <NA>                NA              DNI Group3 survey3_6a11
## 11                  DNI                NA              DNI Group3 survey3_6a11
## 12                 <NA>                NA              DNI Group3 survey3_6a11
## 13                  DNI                NA              DNI Group4 survey3_6a11
## 14                 <NA>                NA              DNI Group4 survey2_6a11
## 15                  DNI                NA              DNI Group3 survey3_6a11
## 16                 <NA>                NA              DNI Group3 survey3_6a11
## 17                  DNI                NA              DNI Group3 survey3_6a11
## 18                 <NA>                NA              DNI Group3 survey3_6a11
## 19                 <NA>                NA              DNI Group4 survey3_6a11
## 20                 <NA>                NA              DNI Group4 survey2_6a11
##    exclude      startdate startdate_formatted duplicate enddate status progress
## 1       no   6/28/21 8:35          2021-06-28      <NA>      NA     NA       NA
## 2       no 11/15/21 11:52          2021-11-15        No      NA     NA       NA
## 3       no   6/28/21 9:52          2021-06-28      <NA>      NA     NA       NA
## 4       no  11/29/21 6:59          2021-11-29        No      NA     NA       NA
## 5       no   6/28/21 8:18          2021-06-28      <NA>      NA     NA       NA
## 6       no 11/16/21 11:09          2021-11-16        No      NA     NA       NA
## 7       no  7/20/21 16:39          2021-07-20      <NA>      NA     NA       NA
## 8       no 11/19/21 17:21          2021-11-19        No      NA     NA       NA
## 9       no   6/28/21 6:59          2021-06-28      <NA>      NA     NA       NA
## 10      no 11/15/21 10:21          2021-11-15        No      NA     NA       NA
## 11      no  6/28/21 13:00          2021-06-28      <NA>      NA     NA       NA
## 12      no 11/18/21 17:23          2021-11-18        No      NA     NA       NA
```

```
## 13      no   6/28/21 7:30          2021-06-28      <NA>      NA     NA       NA
## 14      no  11/8/21 12:13          2021-11-08        No      NA     NA       NA
## 15      no   7/5/21 10:50          2021-07-05      <NA>      NA     NA       NA
## 16      no 11/18/21 17:57          2021-11-18        No      NA     NA       NA
## 17      no   6/28/21 7:26          2021-06-28      <NA>      NA     NA       NA
## 18      no 11/15/21 13:08          2021-11-15        No      NA     NA       NA
## 19      no   6/28/21 9:12          2021-06-28      <NA>      NA     NA       NA
## 20      no  11/8/21 12:00          2021-11-08        No      NA     NA       NA
##    duration finished distribution ballotbox gender birthmth birthyr
## 1        NA       NA         <NA>        NA      M       12    2007
## 2        NA       NA        email        NA      M       12    2007
## 3        NA       NA         <NA>        NA      F       12    2007
## 4        NA       NA        email        NA      F       12    2007
## 5        NA       NA         <NA>        NA      F       12    2007
## 6        NA       NA        email        NA      F       12    2007
## 7        NA       NA         <NA>        NA      M       12    2007
## 8        NA       NA        email        NA      M       12    2007
## 9        NA       NA         <NA>        NA      F       12    2007
## 10       NA       NA        email        NA      F       12    2007
## 11       NA       NA         <NA>        NA      F       12    2007
## 12       NA       NA        email        NA      F       12    2007
## 13       NA       NA         <NA>        NA      M        7    2008
## 14       NA       NA        email        NA      M        7    2008
## 15       NA       NA         <NA>        NA      F       12    2007
## 16       NA       NA        email        NA      F       12    2007
## 17       NA       NA         <NA>        NA      M       12    2007
## 18       NA       NA        email        NA      M       12    2007
## 19       NA       NA         <NA>        NA      F       12    2007
## 20       NA       NA        email        NA      F       12    2007
##    age_selfreport grade_2020 grade_2021                        school
## 1            13.6          7          8             SJL 2 - Canto Grande
## 2            14.0          7          8             SJL 2 - Canto Grande
## 3            13.6          6          7                   SJL 4 - El Sol
## 4            14.0          6          7                   SJL 4 - El Sol
## 5            13.6          7          8            Callao 3 - Santa Rosa
## 6            14.0          7          8            Callao 3 - Santa Rosa
## 7            13.6          7          8             Comas 2 - El Retablo
## 8            14.0          7          8             Comas 2 - El Retablo
## 9            13.6          7          8 Arequipa 1 - Bustamante y Rivero
## 10           14.0          7          8 Arequipa 1 - Bustamante y Rivero
## 11           13.6          7          8 Arequipa 1 - Bustamante y Rivero
## 12           14.0          7          8 Arequipa 1 - Bustamante y Rivero
## 13           13.0          6          7        Pueblo Libre 1 - Bertello
## 14           13.4          6          7        Pueblo Libre 1 - Bertello
## 15           13.6          7          8      Arequipa 2 - Cerro Colorado
## 16           14.0          7          8      Arequipa 2 - Cerro Colorado
## 17           13.6          7          8        Chorrillos 4 - La Campi-a
## 18           14.0          7          8     Chorrillos 4 - La Campi\x96a
## 19           13.6          7          8               Surco 1 - Ambrosio
## 20           15.9          7          8               Surco 1 - Ambrosio
##    section digcit digcit_school digcit_grade digcit_class covid_anx covid_dep
## 1        B     NA            NA           NA           NA         2         2
## 2        B     NA            NA           NA           NA         2         1
## 3        A     NA            NA           NA           NA         1         1
```

```
## 4        A     NA            NA            NA            NA         2         3
## 5        A     NA            NA            NA            NA         3         3
## 6        A     NA            NA            NA            NA         3         4
## 7        B     NA            NA            NA            NA         1         1
## 8        B     NA            NA            NA            NA         0         1
## 9        A     NA            NA            NA            NA         3         2
## 10       A     NA            NA            NA            NA        NA        NA
## 11       B     NA            NA            NA            NA         2         4
## 12       B     NA            NA            NA            NA         3         3
## 13       C     NA            NA            NA            NA         1         2
## 14       C     NA            NA            NA            NA         0         0
## 15       A     NA            NA            NA            NA         0         1
## 16       B     NA            NA            NA            NA         0         1
## 17       B     NA            NA            NA            NA         0         0
## 18       B     NA            NA            NA            NA         0         0
## 19       A     NA            NA            NA            NA         1         4
## 20       A     NA            NA            NA            NA         3         3
##    covid_alone covid_ok dss1 dss2 dss3 dss4 dss5 dss6 dss7 dss8 dss9 dss10
## 1            0        4    1    3    2    1    2    2    2    2    2     2
## 2            0        4    2    2    2    1    1    2    2    2    2     1
## 3            1        2    2    3    2    2    2    2    2    2    2     2
## 4            2        2    2    2    2    2    2    2    3    2    2     2
## 5            2        5    1    2    3    1    1    1    2    2    1     1
## 6            1        5    1    3    2    1    1    2    1    1    1     1
## 7            0        4    2    3    1    1    1    1    1    1    1     1
## 8            0        5    1    1    1    1    1    1    1    1    1     1
## 9            1        2    1    2    4    4    4    2    4    4    4     4
## 10          NA       NA    1    2    2    1    3    1    2    1    2     1
## 11           2        3    1    1    1    1    2    1    1    1    1     1
## 12           5        3    1    2    1    1    1    1    1    1    1     1
## 13           2        2    1    1    1    1    1    1    1    1    1     1
## 14           4        2    1    1    1    1    1    1    1    1    1     1
## 15           0        5    4    3    1    2    2    2    1    2    1     2
## 16           0        5    4    3    2    2    2    2    3    2    2     2
## 17           0        4    1    2    1    1    1    1    1    1    1     1
## 18           0        3    1    1    1    1    1    1    1    1    1     1
## 19           1        1    2    4    2    1    1    1    2    5    2     1
## 20           0        3    1    2    2    1    1    2    2    2    2     1
##    dss11 dss12 dss13 dss14 dss15 dss16 dss17 dss18 dss19 dss20 dssNA_num
## 1      1     2     2     1     1     2     2     1     2     1          0
## 2      2     2     1     1     2     2     1     2    NA    NA          2
## 3      2     2     2     2     3     2     2     2     2     2          0
## 4      3     2     2     2     1     2     1     1    NA    NA          2
## 5      1     1     1     2     2     1     2     1     1     1          0
## 6      1     1     1     2     1     1     1     1    NA    NA          2
## 7      1     2     1     1     1     2     1     2     1     1          0
## 8      1     1     1     1     1     1     1     1    NA    NA          2
## 9      3     3     2     1     3     1     3     1     1     1          0
## 10     2    NA    NA    NA    NA    NA    NA    NA    NA    NA          9
## 11     1     1     1     1     1     1     1     2     1     1          0
## 12     1     1     1     1     1     1     1     1    NA    NA          2
## 13     1     1     1     1     1     1     1     1     1     1          0
## 14     1     1     1     1     1     1     1     1    NA    NA          2
## 15     2     2     2     1     2     2     3     3     3     3          0
```

```
## 16     2     1     1     2     3     4     3     4    NA    NA         2
## 17     1     1     1     1     1     2     1     2     1     1         0
## 18     1     1     1     1     1     1     1     1    NA    NA         2
## 19     2     1     1     1     1     1     2     3     1     1         0
## 20     1     1     1     2     1     1     1     1    NA    NA         2
##    promis_dep1 promis_dep2 promis_dep3 promis_dep4 promis_dep5 promis_dep6
## 1            3           1           2           2           1           3
## 2            2           1           2           3           1           3
## 3            3           3           3           3           3           3
## 4            3           3           3           3           3           3
## 5            2           1           1           4           1           1
## 6            2           2           1           1           1           2
## 7            1           3           2           1           3           1
## 8            1           1           1           1           1           1
## 9            4           4           3           3           4           4
## 10           3           4           3           3           4           3
## 11           2           2           1           3           2           1
## 12           1           2           1           1           1           1
## 13           2           3           3           3           3           2
## 14           1           4           1           1           4           1
## 15           2           1           1           2           2           1
## 16           4           5           5           4           5           5
## 17           2           1           1           2           1           2
## 18           1           1           1           1           1           1
## 19           2           2           2           2           2           1
## 20           2           1           5           5           1           5
##    promis_dep7 promis_dep8 promis_anx1 promis_anx2 promis_anx3 promis_anx4 pss1
## 1            2           3           2           2           1           1    3
## 2            1           2           1           2           3           2    3
## 3            3           3           2           3           3           3    3
## 4            3           3           3           3           3           2    3
## 5            2           2           2           2           1           1    3
## 6            2           1           2           2           2           2    2
## 7            4           5           2           3           1           3    3
## 8            3           3           1           1           1           2    3
## 9            3           3           2           4           4           4    4
## 10           2           2           2           3           3           3   NA
## 11           3           1           5           3           2           5    1
## 12           1           3           2           1           1           1    5
## 13           3           3           1           1           4           1    2
## 14           3           4           1           1           1           1    1
## 15           1           1           2           2           1           2    2
## 16           4           1           3           5           5           5    3
## 17           2           2           2           1           1           2    1
## 18           1           1           1           1           1           1    1
## 19           1           3           3           1           3           5    3
## 20           3           3           2           1           3           4    2
##    pss2 pss3 pss4
## 1     2    2    2
## 2     4    3    3
## 3     3    3    3
## 4     3    3    2
## 5     3    3    3
## 6     5    3    4
```

```
## 7     5    4    2
## 8     5    3    2
## 9     4    3    3
## 10   NA   NA   NA
## 11    3    1    1
## 12    5    3    4
## 13    3    3    1
## 14    5    4    3
## 15    4    4    2
## 16    5    4    3
## 17    1    3    1
## 18    4    4    1
## 19    3    2    2
## 20    3    3    2
```

```
tail(peru5_6, 20)
```

```
##      Peru3_4_5_6_ID   wave Peru3_4_5_ID Peru3_4_ID wave_ID
## 1545    3_4_5_6_928 Peru 5   3_4_5_1013         NA  5_3814
## 1546    3_4_5_6_928 Peru 6         <NA>         NA   6_600
## 1547    3_4_5_6_942 Peru 5   3_4_5_1030         NA  5_3819
## 1548    3_4_5_6_942 Peru 6         <NA>         NA   6_612
## 1549    3_4_5_6_943 Peru 5   3_4_5_1032         NA  5_3821
## 1550    3_4_5_6_943 Peru 6         <NA>         NA   6_613
## 1551    3_4_5_6_952 Peru 5   3_4_5_1041         NA  5_3824
## 1552    3_4_5_6_952 Peru 6         <NA>         NA   6_615
## 1553     3_4_5_6_96 Peru 5  3_4_5_23057         NA  5_3465
## 1554     3_4_5_6_96 Peru 6         <NA>         NA    6_84
## 1555    3_4_5_6_962 Peru 5  3_4_5_23193         NA  5_3826
## 1556    3_4_5_6_962 Peru 6         <NA>         NA   6_622
## 1557    3_4_5_6_963 Peru 5  3_4_5_23194         NA  5_3827
## 1558    3_4_5_6_963 Peru 6         <NA>         NA   6_623
## 1559     3_4_5_6_98 Peru 5     3_4_5_98         NA  5_3466
## 1560     3_4_5_6_98 Peru 6         <NA>         NA    6_85
## 1561    3_4_5_6_985 Peru 5   3_4_5_1075         NA  5_3832
## 1562    3_4_5_6_985 Peru 6         <NA>         NA   6_638
## 1563    3_4_5_6_989 Peru 5  3_4_5_23196         NA  5_3833
## 1564    3_4_5_6_989 Peru 6         <NA>         NA   6_641
##      peru3_4_5_6matchfactor peru3_4_5matchfactor peru3_4matchfactor
## 1545                    DNI                 DNI                NA
## 1546                    DNI                <NA>                NA
## 1547                    DNI                 DNI                NA
## 1548                    DNI                <NA>                NA
## 1549                    DNI                 DNI                NA
## 1550                    DNI                <NA>                NA
## 1551                    DNI                 DNI                NA
## 1552                    DNI                <NA>                NA
## 1553                    DNI                <NA>                NA
## 1554                    DNI                <NA>                NA
## 1555                    DNI                <NA>                NA
## 1556                    DNI                <NA>                NA
## 1557                    DNI                <NA>                NA
## 1558                    DNI                <NA>                NA
## 1559                    DNI                 DNI                NA
## 1560                    DNI                <NA>                NA
```

```
## 1561                   DNI                  DNI                NA
## 1562                   DNI                 <NA>                NA
## 1563                   DNI                 <NA>                NA
## 1564                   DNI                 <NA>                NA
##      wave_matchfactor  group      session exclude      startdate
## 1545              DNI Group4 survey3_6a11      no   6/28/21 8:38
## 1546              DNI Group4 survey2_6a11      no   11/9/21 6:11
## 1547              DNI Group3 survey3_6a11      no  7/20/21 13:06
## 1548              DNI Group3 survey3_6a11      no 11/15/21 12:21
## 1549              DNI Group4 survey3_6a11      no   6/28/21 7:01
## 1550              DNI Group4 survey2_6a11      no   11/9/21 7:42
## 1551              DNI Group3 survey3_6a11      no  6/28/21 10:01
## 1552              DNI Group3 survey3_6a11      no 11/15/21 15:36
## 1553              DNI Group3 survey3_6a11      no  6/28/21 12:55
## 1554              DNI Group3 survey3_6a11      no 11/15/21 18:20
## 1555              DNI Group3 survey3_6a11      no   6/28/21 7:13
## 1556              DNI Group3 survey3_6a11      no 11/18/21 11:33
## 1557              DNI Group3 survey3_6a11      no   6/28/21 7:13
## 1558              DNI Group3 survey3_6a11      no 11/15/21 10:20
## 1559              DNI Group3 survey3_6a11      no  6/28/21 10:30
## 1560              DNI Group3 survey3_6a11      no 11/15/21 11:23
## 1561              DNI Group3 survey3_6a11      no  6/28/21 10:07
## 1562              DNI Group3 survey3_6a11      no 11/15/21 10:14
## 1563              DNI Group3 survey3_6a11      no   6/28/21 7:16
## 1564              DNI Group3 survey3_6a11      no 11/15/21 10:22
##      startdate_formatted duplicate enddate status progress duration finished
## 1545          2021-06-28      <NA>      NA     NA       NA       NA       NA
## 1546          2021-11-09        No      NA     NA       NA       NA       NA
## 1547          2021-07-20      <NA>      NA     NA       NA       NA       NA
## 1548          2021-11-15        No      NA     NA       NA       NA       NA
## 1549          2021-06-28      <NA>      NA     NA       NA       NA       NA
## 1550          2021-11-09        No      NA     NA       NA       NA       NA
## 1551          2021-06-28      <NA>      NA     NA       NA       NA       NA
## 1552          2021-11-15        No      NA     NA       NA       NA       NA
## 1553          2021-06-28      <NA>      NA     NA       NA       NA       NA
## 1554          2021-11-15        No      NA     NA       NA       NA       NA
## 1555          2021-06-28      <NA>      NA     NA       NA       NA       NA
## 1556          2021-11-18        No      NA     NA       NA       NA       NA
## 1557          2021-06-28      <NA>      NA     NA       NA       NA       NA
## 1558          2021-11-15        No      NA     NA       NA       NA       NA
## 1559          2021-06-28      <NA>      NA     NA       NA       NA       NA
## 1560          2021-11-15        No      NA     NA       NA       NA       NA
## 1561          2021-06-28      <NA>      NA     NA       NA       NA       NA
## 1562          2021-11-15        No      NA     NA       NA       NA       NA
## 1563          2021-06-28      <NA>      NA     NA       NA       NA       NA
## 1564          2021-11-15        No      NA     NA       NA       NA       NA
##      distribution ballotbox gender birthmth birthyr age_selfreport grade_2020
## 1545         <NA>        NA      F        9    2007           14.7          7
## 1546        email        NA      F        9    2007           13.9          7
## 1547         <NA>        NA      F        9    2007           13.8          7
## 1548        email        NA      F        9    2007           14.1          7
## 1549         <NA>        NA      F       10    2007           17.2          7
## 1550        email        NA      F       10    2007           16.6          7
## 1551         <NA>        NA      M       12    2007           13.6          7
```

```
## 1552        email        NA      M       12    2007           14.0          7
## 1553         <NA>        NA      M        9    2008           16.9          6
## 1554        email        NA      F        9    2008           15.6          6
## 1555         <NA>        NA      F       12    2007           13.6          7
## 1556        email        NA      F       12    2007           14.0          7
## 1557         <NA>        NA      F        9    2007           17.7          7
## 1558        email        NA      F        9    2007           14.5          7
## 1559         <NA>        NA      F       12    2007           15.0          7
## 1560        email        NA      F       12    2007           15.9          7
## 1561         <NA>        NA      F       12    2007           12.9          7
## 1562        email        NA      F       12    2007           12.9          7
## 1563         <NA>        NA      F       12    2007           13.0          7
## 1564        email        NA      F       12    2007           14.1          7
##      grade_2021                        school section digcit digcit_school
## 1545          8               Callao 2 - Lemos       A     NA            NA
## 1546          8               Callao 2 - Lemos       A     NA            NA
## 1547          8                 SJL 1 - Campoy       B     NA            NA
## 1548          8                 SJL 1 - Campoy       B     NA            NA
## 1549          8               Callao 2 - Lemos       A     NA            NA
## 1550          8               Callao 2 - Lemos       A     NA            NA
## 1551          8           SMP 2 - Canta Callao       A     NA            NA
## 1552          8           SMP 2 - Canta Callao       A     NA            NA
## 1553          7                       Huanuco       A     NA            NA
## 1554          7                       Huanuco       A     NA            NA
## 1555          8       Los Olivos 1 - Villa Sol       A     NA            NA
## 1556          8       Los Olivos 1 - Villa Sol       A     NA            NA
## 1557          8                           SJM       A     NA            NA
## 1558          8                SMP 1 - Per\x9c       A     NA            NA
## 1559          8       Los Olivos 1 - Villa Sol       A     NA            NA
## 1560          8       Los Olivos 1 - Villa Sol       A     NA            NA
## 1561          8               Cusco 1 - Larapa       A     NA            NA
## 1562          8               Cusco 1 - Larapa       A     NA            NA
## 1563          8    Moquegua Đ Fundo el Gramadal       A     NA            NA
## 1564          8 Moquegua \xd0 Fundo el Gramadal       A     NA            NA
##      digcit_grade digcit_class covid_anx covid_dep covid_alone covid_ok dss1
## 1545           NA           NA         2         1           3        3    4
## 1546           NA           NA         2         2           1        3    3
## 1547           NA           NA         5         5           5        2    2
## 1548           NA           NA         5         5           5        1    2
## 1549           NA           NA         1         1           0        4    1
## 1550           NA           NA         1         0           0        4    1
## 1551           NA           NA         3         0           0        4    3
## 1552           NA           NA         2         0           0        4    1
## 1553           NA           NA         5         5           5        3    3
## 1554           NA           NA         5         5           4        0    3
## 1555           NA           NA         4         4           1        2    4
## 1556           NA           NA         4         4           3        2    3
## 1557           NA           NA        NA        NA          NA       NA    2
## 1558           NA           NA         5         5           5        0    3
## 1559           NA           NA         4         5           5        0    2
## 1560           NA           NA         5         5           3        4    3
## 1561           NA           NA         5         5           5        0    3
## 1562           NA           NA         5         5           5        0    4
## 1563           NA           NA         0         0           0        4    1
```

```
## 1564           NA           NA         1         1           0        4    1
##      dss2 dss3 dss4 dss5 dss6 dss7 dss8 dss9 dss10 dss11 dss12 dss13 dss14
## 1545    3    3    4    3    1    2    2    2     1     2     2     1     3
## 1546    3    2    2    2    2    2    2    2     2     3     2     1     1
## 1547    1    1    3    3    3    1    3    2     3     3     3     4     1
## 1548    5    2    4    5    1    3    1    2     3     5     5     2     4
## 1549    2    1    1    1    1    1    2    1     1     1     1     1     1
## 1550    1    1    1    1    1    1    1    1     1     1     1     1     1
## 1551    4    1    2    2    1    1    3    1     1     3     1     3     2
## 1552    2    1    1    1    1    1    1    1     1     1     1     1     2
## 1553    2    4    2    2    1    1    1    2     3     1     1     1     1
## 1554    3    4    2    2    4    3    3    3     2     3     1     2     1
## 1555    5    4    3    3    3    3    5    3     3     2     5     3     2
## 1556    4    3    4    4    4    4   NA   NA    NA    NA    NA    NA    NA
## 1557    3    2    3    3    3    2    2    2     2     2     3    NA    NA
## 1558    3    4    3    5    3    2    4    4     5     5     5     2     5
## 1559    3    1    1    1    1    1    5    1     1     2     3     4     2
## 1560    5    5    1    1    1    5    2    3     4     3     2     2     2
## 1561    4    1    4    4    3    1    5    3     2     2     3     1     1
## 1562    4    3    3    3    3    4    3    3     2     3     3     2     4
## 1563    1    1    1    1    1    1    1    1     1     1     1     1     1
## 1564    1    1    1    1    1    1    1    1     3     1     1     1     1
##      dss15 dss16 dss17 dss18 dss19 dss20 dssNA_num promis_dep1 promis_dep2
## 1545     2     3     3     3     4     3         0           3           3
## 1546     3     3     3     2    NA    NA         2           3           2
## 1547     1     4     4     4     2     2         0           5           5
## 1548     5     4     1     1    NA    NA         2           3           5
## 1549     2     1     1     1     1     1         0           2           1
## 1550     1     1     2     1    NA    NA         2           1           2
## 1551     1     4     2     2     1     2         0           1           1
## 1552     2     3     1     1    NA    NA         2           2           1
## 1553     1     1     3     1     3     2         0           5           5
## 1554     1     4     3     4    NA    NA         2           4           5
## 1555     4     2     5     3     5     5         0           3           2
## 1556    NA    NA    NA    NA    NA    NA        13           5           3
## 1557    NA    NA    NA    NA    NA    NA         8           2           5
## 1558     5     3     3     2    NA    NA         2           3           4
## 1559     2     2     3     5     2     2         0           2           4
## 1560     3     2     2     2    NA    NA         2           3           3
## 1561     2     3     2     3     2     2         0           4           5
## 1562     3     4     4     3    NA    NA         2           4           5
## 1563     1     1     1     2     1     1         0           2           3
## 1564     4     1     1     1    NA    NA         2           2           3
##      promis_dep3 promis_dep4 promis_dep5 promis_dep6 promis_dep7 promis_dep8
## 1545           2           2           4           4           4           2
## 1546           1           2           3           3           4           2
## 1547           4           4           5           5           5           5
## 1548           3           3           5           4           5           5
## 1549           1           1           1           2           3           1
## 1550           1           1           1           2           2           1
## 1551           1           1           1           1           1           1
## 1552           1           2           1           2           1           1
## 1553           3           5           5           5           4           5
## 1554           3           5           5           5           4           4
```

```
## 1555           5           5           2           3           3           3
## 1556           5           5           3           4           2           3
## 1557           3           4           4           3           3           5
## 1558           5           5           5           3           3           4
## 1559           2           3           3           2           4           1
## 1560           4           4           3           3           4           3
## 1561           5           5           5           4           4           3
## 1562           4           5           4           4           4           4
## 1563           1           1           2           1           3           2
## 1564           1           1           3           1           3           1
##      promis_anx1 promis_anx2 promis_anx3 promis_anx4 pss1 pss2 pss3 pss4
## 1545           3           3           3           4    3    3    3    2
## 1546           2           3           3           4    2    2    3    2
## 1547           5           5           5           5    5    1    1    5
## 1548           3           5           5           3    5    1    2    5
## 1549           1           2           1           2    1    4    4    1
## 1550           2           2           1           2    1    5    4    1
## 1551           1           3           2           1    1    4    4    2
## 1552           2           3           3           2    1    5    4    1
## 1553           5           3           3           4    3    2    1    4
## 1554           5           4           3           4    3    1    2    4
## 1555           2           4           4           4    5    4    2    5
## 1556           3           3           3           3    4    3    3    3
## 1557           4           2           3           3   NA   NA   NA   NA
## 1558           5           3           5           3    5    4    2    5
## 1559           2           1           3           5    3    3    3    3
## 1560           3           2           1           4    2    3    3    1
## 1561           3           4           4           5    1    1    1    5
## 1562           3           5           5           5    5    2    1    5
## 1563           2           1           3           1    1    4    4    2
## 1564           2           1           1           1    2    4    5    2
```

#Filter & Preprocess Data ##Select relevant data

```
#Select project specific columns
peru5_6_relevant <- peru5_6 %>%
  select(Peru3_4_5_6_ID, wave_ID, wave, session, exclude, group,
         gender, birthmth, birthyr, age_selfreport,
         grade_2021, startdate_formatted, duplicate,
         promis_dep1:promis_dep8, promis_anx1:promis_anx4,
         dss1, dss2, dss3, dss4, dss5, dss6, dss7, dss8, dss9, dss10,
         dss11, dss12, dss13, dss14, dss15, dss16, dss17, dss18,
         dss19, dss20)

nrow(peru5_6_relevant) # N = 1564 after selecting project specific rows
```

```
## [1] 1564
```

```
#Remove rows that met initial exclusion criteria (i.e., pilot trials).
peru5_6_exclusion <- peru5_6_relevant %>%
  filter(exclude== 'no')

nrow(peru5_6_exclusion) # N = 1564 after selecting project specific rows
```

```
## [1] 1564
```

```r
#Select relevant groups (based on those who completed all variables of interest)
peru5_6_group <- peru5_6_exclusion %>%
  filter(group== "Group3")

nrow(peru5_6_group) # N = 1055 after selecting project specific groups (Group 3)
```

```
## [1] 1055
```

```r
#Select relevant sessions (based on those who completed all variables of interest)
peru5_6_group_session <- peru5_6_group %>%
  filter(session== "survey1_6a11" | session== "survey3_6a11")

nrow(peru5_6_group_session) # N = 1055 after selecting project specific groups AND sessions (sessions 1
```

```
## [1] 1055
```

##Check demographics type

```r
#Check
typeof(peru5_6_group_session$gender) #currently a character -- change to factor
```

```
## [1] "character"
```

```r
typeof(peru5_6_group_session$grade_2021) #currently an integer -- ok
```

```
## [1] "integer"
```

```r
typeof(peru5_6_group_session$age_selfreport) #currently a double -- ok
```

```
## [1] "double"
```

##Re-code sex

```r
#Re-code sex for future analyse
peru5_6_group_session <- peru5_6_group_session %>%
  dplyr::mutate_at(c('gender'),
  funs(dplyr::recode(., "M"='Male', "F"='Female')))
```

```
## Warning: `funs()` was deprecated in dplyr 0.8.0.
## i Please use a list of either functions or lambdas:
##
## # Simple named list: list(mean = mean, median = median)
##
## # Auto named with `tibble::lst()`: tibble::lst(mean, median)
##
## # Using lambdas list(~ mean(., trim = .2), ~ median(., na.rm = TRUE))
## Call `lifecycle::last_lifecycle_warnings()` to see where this warning was
## generated.
```

```r
#Make into a factor
peru5_6_group_session$gender <- as.factor(peru5_6_group_session$gender)

#Check type (should be factor/integer)
typeof(peru5_6_group_session$gender) #now an integer
```

```
## [1] "integer"
```

##Confirm age variable & limit ages to greater than 10 and lower than 18 (from chatGPT)

```r
#Adapt startdate_formatted format
peru5_6_group_session$startdate_formatted <- as.Date(peru5_6_group_session$startdate_formatted, format =

#Get year and month from the survey start date
peru5_6_group_session$survey_year <- as.numeric(format(peru5_6_group_session$startdate_formatted, "%Y"))
peru5_6_group_session$survey_month <- as.numeric(format(peru5_6_group_session$startdate_formatted, "%m"))

#Calculate age at the time the survey was taken
peru5_6_group_session$age_official_confirm <- with(peru5_6_group_session, {
  age_years <- survey_year - birthyr
  # Subtract one year if the survey month is before the birth month
  age_years - ifelse(survey_month < birthmth, 1, 0)
})

#Limit ages to greater than 10 and lower than 18
peru5_6_group_session <- peru5_6_group_session %>%
  filter(age_official_confirm>10&age_official_confirm<18)

#Check sample size after limiting age
nrow(peru5_6_group_session) #N = 1053 (dropped 2 participants due to age restrictions)
```

```
## [1] 1053
```

```r
#Age average and range (round to the nearest tenth)
mean(peru5_6_group_session$age_official_confirm) #12.9
```

```
## [1] 12.88319
```

```r
range(peru5_6_group_session$age_official_confirm, na.rm = FALSE, finite = FALSE) #11 to 17
```

```
## [1] 11 17
```

##Make measure items numeric

```r
#DSS
peru5_6_numeric <- peru5_6_group_session %>%
  mutate_at(vars(dss1:dss20),~as.numeric(as.character(.)))

#PROMIS ANX
peru5_6_numeric <- peru5_6_numeric %>%
  mutate_at(vars(promis_anx1:promis_anx4),~as.numeric(as.character(.)))

#PROMIS DEP
peru5_6_numeric <- peru5_6_numeric %>%
  mutate_at(vars(promis_dep1:promis_dep8),~as.numeric(as.character(.)))
```

##Match DSS items across Peru 5 and Peru 6 data ###Adjust Peru 5

```r
#IMPORTANT NOTE: DSS items 1-20 were administered in Peru 5, however items 6 and 18 were removed after
#make DF with only Peru 5 data
p5_only <- peru5_6_numeric[grepl("5_", peru5_6_numeric$wave_ID),]

#Check N
nrow(p5_only) #N for Peru 5 only = 526
```

```
## [1] 526
```

```
#drop items 6 and 18
p5_only <- p5_only[, !(names(p5_only) %in% c("dss6", "dss18"))]
```

###Adjust Peru 6

```
#make DF with only Peru 6 data
p6_only <- peru5_6_numeric[grepl("6_", peru5_6_numeric$wave_ID),]

#Check N
nrow(p6_only) #N for Peru 6 only = 527
```

```
## [1] 527
```

```
#drop items 19 and 20 since there is no data for this
p6_only <- p6_only[, !(names(p6_only) %in% c("dss19", "dss20"))]

#Relabel responses to match Peru 5 DSS (no dss 6 or 18) NOTE: ONLY RUN ONCE TO AVOID ERROR.
p6_only <- p6_only %>%
              rename("dss7" = "dss6",
                     "dss8" = "dss7",
                     "dss9" = "dss8",
                     "dss10" = "dss9",
                     "dss11" = "dss10",
                     "dss12" = "dss11",
                     "dss13" = "dss12",
                     "dss14" = "dss13",
                     "dss15" = "dss14",
                     "dss16" = "dss15",
                     "dss17" = "dss16",
                     "dss19" = "dss17",
                     "dss20" = "dss18")
```

###Combine adjusted Peru 5 and Peru 6 dataframes

```
#Combine dataframes
p5_p6_adjusted <- bind_rows(
  p5_only %>% select(Peru3_4_5_6_ID, wave_ID, wave, session, exclude, group, gender, birthmth, birthyr,
                     age_selfreport, age_official_confirm, grade_2021, startdate_formatted,
                     promis_dep1:promis_dep8, promis_anx1:promis_anx4, dss1:dss20),
  p6_only %>% select(Peru3_4_5_6_ID, wave_ID, wave, session, exclude, group, gender, birthmth, birthyr,
                     age_selfreport, age_official_confirm, grade_2021, startdate_formatted,
                     promis_dep1:promis_dep8, promis_anx1:promis_anx4, dss1:dss20))

#Check new dataframe
head(p5_p6_adjusted)
```

```
##   Peru3_4_5_6_ID wave_ID   wave      session exclude  group gender birthmth
## 1   3_4_5_6_1004  5_3835 Peru 5 survey3_6a11      no Group3   Male       12
## 2   3_4_5_6_1016  5_3841 Peru 5 survey3_6a11      no Group3 Female       12
## 3   3_4_5_6_1020  5_3844 Peru 5 survey3_6a11      no Group3 Female       12
## 4   3_4_5_6_1022  5_3845 Peru 5 survey3_6a11      no Group3   Male       12
## 5   3_4_5_6_1035  5_3850 Peru 5 survey3_6a11      no Group3 Female       12
## 6   3_4_5_6_1039  5_3852 Peru 5 survey3_6a11      no Group3 Female       12
##   birthyr age_selfreport age_official_confirm grade_2021 startdate_formatted
## 1    2007           13.6                   13          8          2021-06-28
## 2    2007           13.6                   13          7          2021-06-28
```

```
## 3    2007           13.6                  13          8          2021-06-28
## 4    2007           13.6                  13          8          2021-07-20
## 5    2007           13.6                  13          8          2021-06-28
## 6    2007           13.6                  13          8          2021-06-28
##   promis_dep1 promis_dep2 promis_dep3 promis_dep4 promis_dep5 promis_dep6
## 1           3           1           2           2           1           3
## 2           3           3           3           3           3           3
## 3           2           1           1           4           1           1
## 4           1           3           2           1           3           1
## 5           4           4           3           3           4           4
## 6           2           2           1           3           2           1
##   promis_dep7 promis_dep8 promis_anx1 promis_anx2 promis_anx3 promis_anx4 dss1
## 1           2           3           2           2           1           1    1
## 2           3           3           2           3           3           3    2
## 3           2           2           2           2           1           1    1
## 4           4           5           2           3           1           3    2
## 5           3           3           2           4           4           4    1
## 6           3           1           5           3           2           5    1
##   dss2 dss3 dss4 dss5 dss7 dss8 dss9 dss10 dss11 dss12 dss13 dss14 dss15 dss16
## 1    3    2    1    2    2    2    2     2     1     2     2     1     1     2
## 2    3    2    2    2    2    2    2     2     2     2     2     2     3     2
## 3    2    3    1    1    2    2    1     1     1     1     1     2     2     1
## 4    3    1    1    1    1    1    1     1     1     2     1     1     1     2
## 5    2    4    4    4    4    4    4     4     3     3     2     1     3     1
## 6    1    1    1    2    1    1    1     1     1     1     1     1     1     1
##   dss17 dss19 dss20
## 1     2     2     1
## 2     2     2     2
## 3     2     1     1
## 4     1     1     1
## 5     3     1     1
## 6     1     1     1
```

```
#Sample size (should be N before splitting sample)
nrow(p5_p6_adjusted) #N = 1053
```

```
## [1] 1053
```

```
#Adjust data to long format
p5_p6_adjusted <- p5_p6_adjusted %>%
  arrange(Peru3_4_5_6_ID, group)
```

#Careless Responses & NAs ##Remove careless DSS responses

```
#call careless package to remove repeated responses for DSS
#Note: chunk won't run without the careless library
library(careless)

#Create a new variable in the DF named careless, which is TRUE if participants have the same value in e
p5_p6_adjusted$careless <- ifelse(apply(p5_p6_adjusted[ ,(which(colnames (p5_p6_adjusted) == "dss1")):(

#For participants who reported the same response on items of the DSS measure, label as "NA." We decided
p5_p6_adjusted <- p5_p6_adjusted %>%
   mutate(
     dss1 = ifelse(
                careless == TRUE,
```

```
                        "NA", dss1),
    dss2 = ifelse(
               careless == TRUE,
                        "NA", dss2),
    dss3 = ifelse(
               careless == TRUE,
                        "NA", dss3),
    dss4 = ifelse(
               careless == TRUE,
                        "NA", dss4),
    dss5 = ifelse(
               careless == TRUE,
                        "NA", dss5),
    dss7 = ifelse(
               careless == TRUE,
                        "NA", dss7),
    dss8 = ifelse(
               careless == TRUE,
                        "NA", dss8),
    dss9 = ifelse(
               careless == TRUE,
                        "NA", dss9),
    dss10 = ifelse(
               careless == TRUE,
                        "NA", dss10),
    dss11 = ifelse(
               careless == TRUE,
                        "NA", dss11),
    dss12 = ifelse(
               careless == TRUE,
                        "NA", dss12),
    dss13 = ifelse(
               careless == TRUE,
                        "NA", dss13),
    dss14 = ifelse(
               careless == TRUE,
                        "NA", dss14),
    dss15 = ifelse(
               careless == TRUE,
                        "NA", dss15),
    dss16 = ifelse(
               careless == TRUE,
                        "NA", dss16),
    dss17 = ifelse(
               careless == TRUE,
                        "NA", dss17),
    dss19 = ifelse(
               careless == TRUE,
                        "NA", dss19),
    dss20 = ifelse(
               careless == TRUE,
                        "NA", dss20))
```

```r
#Double check that the measures are still numeric. Previous runs of the code would change the object ty
##Make DSS numeric
p5_p6_adjusted <- p5_p6_adjusted%>%
  mutate_at(vars(dss1:dss20), ~as.numeric(as.character(.)))
```

```
## Warning: There were 18 warnings in `mutate()`.
## The first warning was:
## i In argument: `dss1 = (structure(function (..., .x = ..1, .y = ..2, . = ..1)
##   ...`.
## Caused by warning in `as.numeric()`:
## ! NAs introduced by coercion
## i Run `dplyr::last_dplyr_warnings()` to see the 17 remaining warnings.
```

```r
##Check
typeof(p5_p6_adjusted$dss1)
```

```
## [1] "double"
```

```r
#Table summarizing results from the careless package
table(p5_p6_adjusted$careless) #Excluded 55 participants who had careless responses
```

```
##
## FALSE  TRUE
##   998    55
```

```r
#Keep participants who did not respond with the same answer repeatedly (i.e., FALSE careless)
p5_p6_adjusted <- p5_p6_adjusted %>%
  filter(careless == FALSE)

#Check new sample size of DF that doesn't include people who had careless responses.
nrow(p5_p6_adjusted) #N = 998, dropped 55 participants with careless responses
```

```
## [1] 998
```

##Drop NAs

```r
#Check sample size before dropping NAs
#Check new sample size
nrow(p5_p6_adjusted) #N = 998
```

```
## [1] 998
```

```r
#Count number of NAs IN ANY MEASURE for each participant
p5_p6_adjusted_na_count <- p5_p6_adjusted %>%
  mutate(
    count_all_na = rowSums(is.na(select(.,one_of(c(
      'dss1','dss2', 'dss3', 'dss4', 'dss5',
      'dss7', 'dss8', 'dss9', 'dss10', 'dss11', 'dss12',
      'dss13', 'dss14', 'dss15', 'dss16', 'dss17', 'dss19', 'dss20',
      'promis_anx1', 'promis_anx2', 'promis_anx3', 'promis_anx4',
      'promis_dep1', 'promis_dep2', 'promis_dep3', 'promis_dep4','promis_dep5', 'promis_dep6', 'promis_

#Keep only complete cases with filter. Drop people who had ANY NAs. RATIONALE: Given our large sample s
p5_p6_adjusted_no_na <- p5_p6_adjusted_na_count %>%
  filter(count_all_na <= 0)

#Check new sample size
nrow(p5_p6_adjusted_no_na) #N = 973, dropped 25 due to NAs
```

```
## [1] 973
```

#Score items ##DSS Scoring - Mean Score ###Availability Stress Score

```
p5_p6_availstress_score <- p5_p6_adjusted_no_na %>%
  mutate(
    avail_stress=rowMeans(select(., dss1, dss19, dss20))
)

#Range
range(p5_p6_availstress_score$avail_stress) #1-5
```

```
## [1] 1 5
```

```
#Mean
mean(p5_p6_availstress_score$avail_stress) #2.0531
```

```
## [1] 2.0531
```

```
#SD
sd(p5_p6_availstress_score$avail_stress) #0.9025638
```

```
## [1] 0.9025638
```

###Approval Anxiety Score

```
p5_p6_appanx_score <- p5_p6_availstress_score %>%
  mutate(
    approval_anx=rowMeans(select(., dss3, dss7, dss9, dss10))
)

#Range
range(p5_p6_appanx_score$approval_anx) #1-5
```

```
## [1] 1 5
```

```
#Mean
mean(p5_p6_appanx_score$approval_anx) #2.032117
```

```
## [1] 2.032117
```

```
#SD
sd(p5_p6_appanx_score$approval_anx) #1.125912
```

```
## [1] 1.125912
```

###FOMO Score

```
p5_p6_fomo_score <- p5_p6_appanx_score %>%
  mutate(
    fomo=rowMeans(select(., dss4, dss5, dss14, dss15))
)

#Range
range(p5_p6_fomo_score$fomo) #1-5
```

```
## [1] 1 5
```

```
#Mean
mean(p5_p6_fomo_score$fomo) #1.914954
```

```
## [1] 1.914954
```

```
#SD
sd(p5_p6_fomo_score$fomo) #0.9263101
```

```
## [1] 0.9263101
```

###Connection Overload Score

```
p5_p6_overload_score <- p5_p6_fomo_score %>%
  mutate(
    connect_overload=rowMeans(select(., dss11, dss13, dss16))
)

#Range
range(p5_p6_overload_score$connect_overload) #1-5
```

```
## [1] 1 5
```

```
#Mean
mean(p5_p6_overload_score$connect_overload) #1.913669
```

```
## [1] 1.913669
```

```
#SD
sd(p5_p6_overload_score$connect_overload) #0.8583178
```

```
## [1] 0.8583178
```

###Online vigilance Score

```
p5_p6_vigilance_score <- p5_p6_overload_score %>%
  mutate(
    online_vigil=rowMeans(select(., dss2, dss8, dss12, dss17))
)

#Range
range(p5_p6_vigilance_score$online_vigil) #1-5
```

```
## [1] 1 5
```

```
#Mean
mean(p5_p6_vigilance_score$online_vigil) #2.490236
```

```
## [1] 2.490236
```

```
#SD
sd(p5_p6_vigilance_score$online_vigil) #0.9763311
```

```
## [1] 0.9763311
```

###Total digital stress score

```
p5_p6_alldss_scored <- p5_p6_vigilance_score %>%
  mutate(
    dss_total_avg=rowMeans(select(., dss1, dss2, dss3, dss4, dss5, dss7, dss8, dss9, dss10,
        dss11, dss12, dss13, dss14, dss15, dss16, dss17, dss19, dss20))
)

#Range
range(p5_p6_alldss_scored$dss_total_avg) #1.055556 4.833333
```

```
## [1] 1.055556 4.833333
```

```r
#Mean
mean(p5_p6_alldss_scored$dss_total_avg) #2.091641
```

```
## [1] 2.091641
```

```r
#SD
sd(p5_p6_alldss_scored$dss_total_avg) #0.7585636
```

```
## [1] 0.7585636
```

##PROMIS Anxiety - Sum Score

```r
#Sum score
p5_p6_alldss_promisanx_scored <- p5_p6_alldss_scored %>%
  mutate(
    promis_anx_sum=rowSums(select(., promis_anx1:promis_anx4))
)

#Range
range(p5_p6_alldss_promisanx_scored$promis_anx_sum) #4-20
```

```
## [1]  4 20
```

```r
#Mean
mean(p5_p6_alldss_promisanx_scored$promis_anx_sum) #10.86536
```

```
## [1] 10.86536
```

```r
#SD
sd(p5_p6_alldss_promisanx_scored$promis_anx_sum) #3.81347
```

```
## [1] 3.81347
```

##PROMIS Depression - Sum Score

```r
#Sum score
p5_p6_fully_scored <- p5_p6_alldss_promisanx_scored %>%
  mutate(
    promis_dep_sum=rowSums(select(., promis_dep1:promis_dep8))
)

#Range
range(p5_p6_fully_scored$promis_dep_sum) #8-40
```

```
## [1]  8 40
```

```r
#Mean
mean(p5_p6_fully_scored$promis_dep_sum) #20.42549
```

```
## [1] 20.42549
```

```r
#SD
sd(p5_p6_fully_scored$promis_dep_sum) #8.362778
```

```
## [1] 8.362778
```

#Cronbach Alpha of measures ##Total DSS

```r
#Make DSS specific data frame
dss_total <- p5_p6_fully_scored %>%
  select(dss1, dss2, dss3, dss4, dss5, dss7, dss8, dss9, dss10,
```

```
        dss11, dss12, dss13, dss14, dss15, dss16, dss17, dss19, dss20)

#Check Alpha
alpha(dss_total) #raw alpha = 0.9292514 = 0.93
```

```
##
## Reliability analysis
## Call: alpha(x = dss_total)
##
##   raw_alpha std.alpha G6(smc) average_r S/N    ase mean   sd median_r
##       0.93      0.93    0.95      0.42  13 0.0033  2.1 0.76     0.39
##
##     95% confidence boundaries
##          lower alpha upper
## Feldt     0.92  0.93  0.94
## Duhachek  0.92  0.93  0.94
##
##  Reliability if an item is dropped:
##       raw_alpha std.alpha G6(smc) average_r S/N alpha se var.r med.r
## dss1       0.93      0.93    0.95      0.43  13   0.0034 0.018  0.40
## dss2       0.93      0.93    0.95      0.43  13   0.0034 0.020  0.39
## dss3       0.92      0.92    0.95      0.42  12   0.0036 0.017  0.39
## dss4       0.93      0.93    0.95      0.42  12   0.0035 0.017  0.39
## dss5       0.93      0.93    0.95      0.42  12   0.0035 0.017  0.39
## dss7       0.92      0.92    0.95      0.42  12   0.0036 0.016  0.39
## dss8       0.92      0.92    0.95      0.42  12   0.0035 0.019  0.39
## dss9       0.92      0.92    0.95      0.41  12   0.0036 0.016  0.39
## dss10      0.92      0.92    0.95      0.41  12   0.0036 0.016  0.39
## dss11      0.93      0.93    0.95      0.42  12   0.0035 0.020  0.39
## dss12      0.92      0.92    0.95      0.42  12   0.0036 0.019  0.39
## dss13      0.93      0.93    0.95      0.43  13   0.0034 0.020  0.39
## dss14      0.92      0.92    0.95      0.42  12   0.0035 0.019  0.38
## dss15      0.92      0.92    0.95      0.42  12   0.0035 0.019  0.39
## dss16      0.93      0.93    0.95      0.43  13   0.0033 0.018  0.40
## dss17      0.93      0.93    0.95      0.42  12   0.0035 0.020  0.39
## dss19      0.93      0.93    0.95      0.43  13   0.0034 0.019  0.40
## dss20      0.93      0.93    0.95      0.43  13   0.0034 0.018  0.40
##
##  Item statistics
##         n raw.r std.r r.cor r.drop mean  sd
## dss1  973  0.54  0.56  0.53   0.49  2.2 1.0
## dss2  973  0.62  0.62  0.58   0.56  2.9 1.2
## dss3  973  0.74  0.73  0.72   0.69  2.2 1.3
## dss4  973  0.67  0.66  0.66   0.62  2.1 1.2
## dss5  973  0.67  0.67  0.66   0.62  2.0 1.1
## dss7  973  0.75  0.74  0.74   0.71  2.0 1.2
## dss8  973  0.69  0.69  0.67   0.64  2.4 1.2
## dss9  973  0.78  0.77  0.77   0.74  2.0 1.2
## dss10 973  0.80  0.79  0.79   0.76  2.0 1.2
## dss11 973  0.67  0.68  0.65   0.63  1.9 1.0
## dss12 973  0.73  0.72  0.71   0.68  2.2 1.2
## dss13 973  0.62  0.63  0.60   0.57  1.8 1.0
## dss14 973  0.72  0.73  0.71   0.69  1.6 0.9
## dss15 973  0.71  0.71  0.69   0.67  1.9 1.1
```

```
## dss16 973  0.52  0.52  0.49   0.46  2.1 1.1
## dss17 973  0.67  0.67  0.64   0.61  2.5 1.2
## dss19 973  0.61  0.62  0.60   0.56  2.1 1.1
## dss20 973  0.60  0.62  0.60   0.55  1.9 1.0
##
## Non missing response frequency for each item
##          1    2    3    4    5 miss
## dss1  0.29 0.32 0.31 0.07 0.02    0
## dss2  0.13 0.26 0.32 0.19 0.11    0
## dss3  0.43 0.23 0.16 0.11 0.07    0
## dss4  0.42 0.27 0.19 0.08 0.05    0
## dss5  0.44 0.27 0.18 0.07 0.05    0
## dss7  0.48 0.23 0.14 0.09 0.06    0
## dss8  0.26 0.31 0.24 0.11 0.08    0
## dss9  0.48 0.23 0.16 0.07 0.05    0
## dss10 0.47 0.25 0.15 0.09 0.05    0
## dss11 0.46 0.31 0.15 0.06 0.02    0
## dss12 0.38 0.29 0.18 0.09 0.06    0
## dss13 0.51 0.29 0.13 0.04 0.03    0
## dss14 0.58 0.27 0.10 0.03 0.02    0
## dss15 0.46 0.29 0.13 0.08 0.04    0
## dss16 0.39 0.30 0.21 0.07 0.03    0
## dss17 0.26 0.28 0.27 0.12 0.07    0
## dss19 0.37 0.30 0.24 0.06 0.03    0
## dss20 0.48 0.28 0.16 0.05 0.03    0
```

##Availability Stress

```
#Make DSS - availability stress data frame
dss_avail_stress <- p5_p6_fully_scored %>%
  select(dss1, dss19, dss20)

#check alpha
alpha(dss_avail_stress) #raw alpha = 0.841891 = 0.84
```

```
##
## Reliability analysis
## Call: alpha(x = dss_avail_stress)
##
##   raw_alpha std.alpha G6(smc) average_r S/N    ase mean  sd median_r
##       0.84      0.84    0.79      0.64 5.3 0.0088  2.1 0.9     0.66
##
##     95% confidence boundaries
##          lower alpha upper
## Feldt     0.82  0.84  0.86
## Duhachek  0.82  0.84  0.86
##
##  Reliability if an item is dropped:
##       raw_alpha std.alpha G6(smc) average_r S/N alpha se var.r med.r
## dss1       0.83      0.83    0.71      0.71 4.9    0.011    NA  0.71
## dss19      0.79      0.79    0.66      0.66 3.8    0.013    NA  0.66
## dss20      0.71      0.71    0.55      0.55 2.5    0.018    NA  0.55
##
##  Item statistics
##         n raw.r std.r r.cor r.drop mean  sd
```

```
## dss1  973  0.84  0.84  0.71   0.65  2.2 1.0
## dss19 973  0.87  0.87  0.77   0.70  2.1 1.1
## dss20 973  0.91  0.90  0.85   0.78  1.9 1.0
##
## Non missing response frequency for each item
##          1    2    3    4    5 miss
## dss1  0.29 0.32 0.31 0.07 0.02    0
## dss19 0.37 0.30 0.24 0.06 0.03    0
## dss20 0.48 0.28 0.16 0.05 0.03    0
```

##Approval Anxiety

```
#make DSS - approval anxiety specific data frame
dss_approval_anx <- p5_p6_fully_scored %>%
  select(dss3, dss7, dss9, dss10)

#check alpha
alpha(dss_approval_anx) #raw alpha = 0.945593 = 0.95
```

```
##
## Reliability analysis
## Call: alpha(x = dss_approval_anx)
##
##   raw_alpha std.alpha G6(smc) average_r S/N    ase mean  sd median_r
##       0.95      0.95    0.93      0.81  18 0.0029    2 1.1     0.82
##
##     95% confidence boundaries
##          lower alpha upper
## Feldt     0.94  0.95  0.95
## Duhachek  0.94  0.95  0.95
##
##  Reliability if an item is dropped:
##       raw_alpha std.alpha G6(smc) average_r S/N alpha se   var.r med.r
## dss3       0.94      0.94    0.91      0.83  15   0.0035 0.00022  0.82
## dss7       0.92      0.93    0.90      0.81  12   0.0043 0.00145  0.79
## dss9       0.93      0.93    0.90      0.81  13   0.0040 0.00044  0.82
## dss10      0.93      0.93    0.90      0.81  13   0.0041 0.00070  0.82
##
##  Item statistics
##         n raw.r std.r r.cor r.drop mean  sd
## dss3  973  0.92  0.91  0.87   0.85  2.2 1.3
## dss7  973  0.94  0.94  0.91   0.88  2.0 1.2
## dss9  973  0.93  0.93  0.90   0.87  2.0 1.2
## dss10 973  0.93  0.93  0.90   0.88  2.0 1.2
##
## Non missing response frequency for each item
##          1    2    3    4    5 miss
## dss3  0.43 0.23 0.16 0.11 0.07    0
## dss7  0.48 0.23 0.14 0.09 0.06    0
## dss9  0.48 0.23 0.16 0.07 0.05    0
## dss10 0.47 0.25 0.15 0.09 0.05    0
```

##FOMO

```
#make DSS - FOMO specific data frame
dss_fomo <- p5_p6_fully_scored %>%
```

```
  select(dss4, dss5, dss14, dss15)

#check alpha
alpha(dss_fomo) #raw alpha = 0.8731212 = 0.87
```

```
##
## Reliability analysis
## Call: alpha(x = dss_fomo)
##
##   raw_alpha std.alpha G6(smc) average_r S/N    ase mean   sd median_r
##       0.87      0.87    0.86      0.63 6.9 0.0065  1.9 0.93     0.62
##
##     95% confidence boundaries
##          lower alpha upper
## Feldt     0.86  0.87  0.89
## Duhachek  0.86  0.87  0.89
##
##  Reliability if an item is dropped:
##       raw_alpha std.alpha G6(smc) average_r S/N alpha se  var.r med.r
## dss4       0.81      0.82    0.76      0.60 4.5   0.0101 0.0035  0.62
## dss5       0.81      0.82    0.76      0.60 4.5   0.0101 0.0041  0.63
## dss14      0.87      0.87    0.84      0.69 6.8   0.0073 0.0152  0.63
## dss15      0.84      0.84    0.81      0.63 5.2   0.0084 0.0306  0.54
##
##  Item statistics
##         n raw.r std.r r.cor r.drop mean  sd
## dss4  973  0.89  0.88  0.86   0.79  2.1 1.2
## dss5  973  0.89  0.88  0.86   0.79  2.0 1.1
## dss14 973  0.77  0.80  0.69   0.64  1.6 0.9
## dss15 973  0.85  0.85  0.77   0.72  1.9 1.1
##
## Non missing response frequency for each item
##          1    2    3    4    5 miss
## dss4  0.42 0.27 0.19 0.08 0.05    0
## dss5  0.44 0.27 0.18 0.07 0.05    0
## dss14 0.58 0.27 0.10 0.03 0.02    0
## dss15 0.46 0.29 0.13 0.08 0.04    0
```

##Connection Overload

```
#make Connection Overload specific data frame
dss_connect <- p5_p6_fully_scored %>%
  select(dss11, dss13, dss16)

#check alpha
alpha(dss_connect) #raw alpha = 0.7646301 = 0.76
```

```
##
## Reliability analysis
## Call: alpha(x = dss_connect)
##
##   raw_alpha std.alpha G6(smc) average_r S/N   ase mean   sd median_r
##       0.76      0.77    0.69      0.52 3.3 0.013  1.9 0.86     0.53
##
##     95% confidence boundaries
```

```
##          lower alpha upper
## Feldt     0.74  0.76  0.79
## Duhachek  0.74  0.76  0.79
##
##  Reliability if an item is dropped:
##       raw_alpha std.alpha G6(smc) average_r S/N alpha se var.r med.r
## dss11      0.69      0.69    0.53      0.53 2.2    0.020    NA  0.53
## dss13      0.63      0.63    0.46      0.46 1.7    0.024    NA  0.46
## dss16      0.73      0.73    0.58      0.58 2.7    0.017    NA  0.58
##
##  Item statistics
##         n raw.r std.r r.cor r.drop mean  sd
## dss11 973  0.82  0.82  0.68   0.59  1.9 1.0
## dss13 973  0.85  0.85  0.74   0.64  1.8 1.0
## dss16 973  0.81  0.80  0.63   0.56  2.1 1.1
##
## Non missing response frequency for each item
##          1    2    3    4    5 miss
## dss11 0.46 0.31 0.15 0.06 0.02    0
## dss13 0.51 0.29 0.13 0.04 0.03    0
## dss16 0.39 0.30 0.21 0.07 0.03    0
```

##Online Vigilance

```
#make Online Vigilance specific data frame
dss_online <- p5_p6_fully_scored %>%
  select(dss2, dss8, dss12, dss17)

#check alpha
alpha(dss_online) #raw alpha = 0.8340929 = 0.83
```

```
##
## Reliability analysis
## Call: alpha(x = dss_online)
##
##   raw_alpha std.alpha G6(smc) average_r S/N    ase mean   sd median_r
##       0.83      0.83     0.8      0.56   5 0.0087  2.5 0.98     0.54
##
##     95% confidence boundaries
##          lower alpha upper
## Feldt     0.82  0.83  0.85
## Duhachek  0.82  0.83  0.85
##
##  Reliability if an item is dropped:
##       raw_alpha std.alpha G6(smc) average_r S/N alpha se  var.r med.r
## dss2       0.85      0.85    0.79      0.65 5.5   0.0086 0.0042  0.61
## dss8       0.76      0.76    0.68      0.51 3.1   0.0136 0.0073  0.46
## dss12      0.76      0.76    0.69      0.52 3.2   0.0131 0.0066  0.48
## dss17      0.79      0.79    0.74      0.55 3.7   0.0119 0.0214  0.48
##
##  Item statistics
##         n raw.r std.r r.cor r.drop mean  sd
## dss2  973  0.73  0.73  0.58   0.53  2.9 1.2
## dss8  973  0.86  0.86  0.82   0.74  2.4 1.2
## dss12 973  0.85  0.85  0.80   0.72  2.2 1.2
```

```
## dss17 973  0.82  0.82  0.73   0.67  2.5 1.2
##
## Non missing response frequency for each item
##          1    2    3    4    5 miss
## dss2  0.13 0.26 0.32 0.19 0.11    0
## dss8  0.26 0.31 0.24 0.11 0.08    0
## dss12 0.38 0.29 0.18 0.09 0.06    0
## dss17 0.26 0.28 0.27 0.12 0.07    0
```

##PROMIS Anxiety

```
#make PROMIS Anxiety specific data frame
promis_anx_alpha <- p5_p6_fully_scored %>%
  select(promis_anx1:promis_anx4)

#check alpha
alpha(promis_anx_alpha) #raw alpha = 0.7830833 = 0.78
```

```
##
## Reliability analysis
## Call: alpha(x = promis_anx_alpha)
##
##   raw_alpha std.alpha G6(smc) average_r S/N   ase mean   sd median_r
##       0.78      0.78    0.74      0.47 3.6 0.011  2.7 0.95     0.45
##
##     95% confidence boundaries
##          lower alpha upper
## Feldt     0.76  0.78  0.80
## Duhachek  0.76  0.78  0.81
##
##  Reliability if an item is dropped:
##             raw_alpha std.alpha G6(smc) average_r S/N alpha se  var.r med.r
## promis_anx1      0.71      0.71    0.64      0.45 2.4    0.016 0.0176  0.38
## promis_anx2      0.71      0.71    0.64      0.45 2.5    0.016 0.0175  0.38
## promis_anx3      0.68      0.68    0.60      0.42 2.1    0.018 0.0067  0.37
## promis_anx4      0.80      0.80    0.73      0.57 4.0    0.011 0.0028  0.60
##
##  Item statistics
##                n raw.r std.r r.cor r.drop mean  sd
## promis_anx1 973  0.80  0.80  0.71   0.63  2.5 1.2
## promis_anx2 973  0.80  0.80  0.70   0.62  2.7 1.3
## promis_anx3 973  0.84  0.83  0.77   0.68  2.8 1.3
## promis_anx4 973  0.68  0.68  0.49   0.44  2.9 1.2
##
## Non missing response frequency for each item
##                1    2    3    4    5 miss
## promis_anx1 0.25 0.29 0.25 0.14 0.06    0
## promis_anx2 0.22 0.23 0.29 0.16 0.10    0
## promis_anx3 0.20 0.24 0.27 0.19 0.10    0
## promis_anx4 0.14 0.22 0.32 0.21 0.11    0
```

##PROMIS Depression

```
#make PROMIS Depression specific data frame
promis_dep_alpha <- p5_p6_fully_scored %>%
  select(promis_dep1:promis_dep8)
```

```r
#check alpha
alpha(promis_dep_alpha) #raw alpha = 0.940782 = 0.94
```

```
##
## Reliability analysis
## Call: alpha(x = promis_dep_alpha)
##
##   raw_alpha std.alpha G6(smc) average_r S/N    ase mean sd median_r
##       0.94      0.94    0.95      0.66  16 0.0029  2.6  1     0.68
##
##     95% confidence boundaries
##          lower alpha upper
## Feldt     0.93  0.94  0.95
## Duhachek  0.94  0.94  0.95
##
##  Reliability if an item is dropped:
##             raw_alpha std.alpha G6(smc) average_r S/N alpha se  var.r med.r
## promis_dep1      0.93      0.93    0.93      0.65  13   0.0035 0.0093  0.67
## promis_dep2      0.93      0.93    0.93      0.66  13   0.0034 0.0084  0.67
## promis_dep3      0.93      0.93    0.93      0.66  14   0.0033 0.0090  0.67
## promis_dep4      0.93      0.93    0.94      0.66  14   0.0033 0.0085  0.68
## promis_dep5      0.93      0.93    0.93      0.65  13   0.0035 0.0086  0.68
## promis_dep6      0.93      0.93    0.93      0.65  13   0.0035 0.0096  0.66
## promis_dep7      0.94      0.94    0.94      0.68  15   0.0031 0.0108  0.69
## promis_dep8      0.94      0.94    0.95      0.70  17   0.0028 0.0053  0.69
##
##  Item statistics
##               n raw.r std.r r.cor r.drop mean  sd
## promis_dep1 973  0.88  0.88  0.86   0.83  2.5 1.2
## promis_dep2 973  0.87  0.87  0.86   0.82  2.5 1.3
## promis_dep3 973  0.85  0.85  0.83   0.80  2.5 1.3
## promis_dep4 973  0.85  0.84  0.83   0.79  2.6 1.3
## promis_dep5 973  0.88  0.88  0.88   0.84  2.4 1.3
## promis_dep6 973  0.88  0.88  0.87   0.84  2.6 1.2
## promis_dep7 973  0.80  0.80  0.75   0.74  2.5 1.2
## promis_dep8 973  0.72  0.72  0.66   0.64  2.6 1.2
##
## Non missing response frequency for each item
##                1    2    3    4    5 miss
## promis_dep1 0.23 0.29 0.28 0.13 0.08    0
## promis_dep2 0.29 0.24 0.23 0.13 0.11    0
## promis_dep3 0.27 0.25 0.25 0.14 0.09    0
## promis_dep4 0.25 0.22 0.28 0.14 0.10    0
## promis_dep5 0.32 0.23 0.24 0.12 0.09    0
## promis_dep6 0.21 0.26 0.30 0.15 0.08    0
## promis_dep7 0.23 0.27 0.30 0.13 0.07    0
## promis_dep8 0.23 0.24 0.32 0.12 0.09    0
```

#Quick stats ##Sample sizes

```r
#Total sample size
nrow(p5_p6_fully_scored) #N = 973
```

```
## [1] 973
```

```r
#Peru 5 sample size
nrow(p5_p6_fully_scored[p5_p6_fully_scored$wave == 'Peru 5', ]) #N Peru 5 = 496
```

```
## [1] 496
```

```r
#Peru 6 sample size
nrow(p5_p6_fully_scored[p5_p6_fully_scored$wave == 'Peru 6', ]) #N Peru 6 = 477
```

```
## [1] 477
```

##Percentage sex ###Female % of Full sample

```r
total_n <- nrow(p5_p6_fully_scored)
total_n #N = 973
```

```
## [1] 973
```

```r
sex_counts <- table(p5_p6_fully_scored$gender)
sex_counts #F = 625, M = 348
```

```
##
## Female   Male
##    625    348
```

```r
sex_percentage <- (sex_counts / total_n) * 100
sex_percentage #Female = 64.23433 = 64.2%
```

```
##
##   Female     Male
## 64.23433 35.76567
```

###Female % of Peru 5

```r
total_n_p5 <- nrow(p5_p6_fully_scored[p5_p6_fully_scored$wave == 'Peru 5', ])
total_n_p5 #N = 496
```

```
## [1] 496
```

```r
sex_counts_p5 <- table((p5_p6_fully_scored[p5_p6_fully_scored$wave == 'Peru 5', ])$gender)
sex_counts_p5 #F = 306, M = 190
```

```
##
## Female   Male
##    306    190
```

```r
sex_percentage_p5 <- (sex_counts_p5 / total_n_p5) * 100
sex_percentage_p5 #Female = 61.69355 = 61.7%
```

```
##
##   Female     Male
## 61.69355 38.30645
```

###Female % of Peru 6

```r
total_n_p6 <- nrow(p5_p6_fully_scored[p5_p6_fully_scored$wave == 'Peru 6', ])
total_n_p6 #N = 477
```

```
## [1] 477
```

```r
sex_counts_p6 <- table((p5_p6_fully_scored[p5_p6_fully_scored$wave == 'Peru 6', ])$gender)
sex_counts_p6 #F = 319, M = 158
```

```
##
## Female   Male
##    319    158
```

```
sex_percentage_p6 <- (sex_counts_p6 / total_n_p6) * 100
sex_percentage_p6 #Female = 66.87631 = 66.9%
```

```
##
##   Female     Male
## 66.87631 33.12369
```

##Age Range, Mean, SD ###Full Sample

```
#Range age
range(p5_p6_fully_scored$age_official_confirm) #11-17
```

```
## [1] 11 17
```

```
#Mean age
mean(p5_p6_fully_scored$age_official_confirm) #12.88386
```

```
## [1] 12.88386
```

```
#SD age
sd(p5_p6_fully_scored$age_official_confirm) #1.538222
```

```
## [1] 1.538222
```

```
#Range grade
range(p5_p6_fully_scored$grade_2021) #6-11
```

```
## [1]  6 11
```

```
#Mean grade
mean(p5_p6_fully_scored$grade_2021) #7.640288
```

```
## [1] 7.640288
```

```
#SD grade
sd(p5_p6_fully_scored$grade_2021) #1.49557
```

```
## [1] 1.49557
```

###Peru 5 ####Peru 5 data set

```
p5_data <- p5_p6_fully_scored[p5_p6_fully_scored$wave == 'Peru 5', ]
```

####Age & Grade Range, Mean, SD

```
#Range age
range(p5_data$age_official_confirm) #11-17
```

```
## [1] 11 17
```

```
#Mean age
mean(p5_data$age_official_confirm) #12.64113
```

```
## [1] 12.64113
```

```
#SD age
sd(p5_data$age_official_confirm) #1.501596
```

```
## [1] 1.501596
```

```r
#Range grade
range(p5_data$grade_2021) #6-11
```

```
## [1]  6 11
```

```r
#Mean grade
mean(p5_data$grade_2021) #7.627016
```

```
## [1] 7.627016
```

```r
#SD grade
sd(p5_data$grade_2021) #1.489355
```

```
## [1] 1.489355
```

####DSS Range, Mean, SD #####Total DSS

```r
#Range
range(p5_data$dss_total_avg) #1.055556 - 4.833333
```

```
## [1] 1.055556 4.833333
```

```r
#Mean
mean(p5_data$dss_total_avg) #2.12108
```

```
## [1] 2.12108
```

```r
#SD
sd(p5_data$dss_total_avg) #0.7499721
```

```
## [1] 0.7499721
```

#####Availability Stress

```r
#Range
range(p5_data$avail_stress) #1 - 5
```

```
## [1] 1 5
```

```r
#Mean
mean(p5_data$avail_stress) #2.188172
```

```
## [1] 2.188172
```

```r
#SD
sd(p5_data$avail_stress) #0.91844
```

```
## [1] 0.91844
```

#####Approval Anxiety

```r
#Range
range(p5_data$approval_anx) #1 - 5
```

```
## [1] 1 5
```

```r
#Mean
mean(p5_data$approval_anx) #1.998992
```

```
## [1] 1.998992
```

```r
#SD
sd(p5_data$approval_anx) #1.1126
```

```
## [1] 1.1126
```

#####Connection Overload

```
#Range
range(p5_data$connect_overload) #1 - 5
```

```
## [1] 1 5
```

```
#Mean
mean(p5_data$connect_overload) #1.936828
```

```
## [1] 1.936828
```

```
#SD
sd(p5_data$connect_overload) #0.8682174
```

```
## [1] 0.8682174
```

#####FOMO

```
#Range
range(p5_data$fomo) #1 - 5
```

```
## [1] 1 5
```

```
#Mean
mean(p5_data$fomo) #1.890625
```

```
## [1] 1.890625
```

```
#SD
sd(p5_data$fomo) #0.9355535
```

```
## [1] 0.9355535
```

#####Online Vigilance

```
#Range
range(p5_data$online_vigil) #1 - 5
```

```
## [1] 1 5
```

```
#Mean
mean(p5_data$online_vigil) #2.561492
```

```
## [1] 2.561492
```

```
#SD
sd(p5_data$online_vigil) #0.9562389
```

```
## [1] 0.9562389
```

####PROMIS Anxiety Range, Mean, SD

```
#Range
range(p5_data$promis_anx_sum) #4 - 20
```

```
## [1]  4 20
```

```
#Mean
mean(p5_data$promis_anx_sum) #10.66331
```

```
## [1] 10.66331
```

```r
#SD
sd(p5_data$promis_anx_sum) #3.580185
```

```
## [1] 3.580185
```

####PROMIS Depression Range, Mean, SD

```r
#Range
range(p5_data$promis_dep_sum) #8 - 40
```

```
## [1]  8 40
```

```r
#Mean
mean(p5_data$promis_dep_sum) #19.80847
```

```
## [1] 19.80847
```

```r
#SD
sd(p5_data$promis_dep_sum) #8.113439
```

```
## [1] 8.113439
```

###Peru 6 ####Peru 6 data set

```r
p6_data <- p5_p6_fully_scored[p5_p6_fully_scored$wave == 'Peru 6', ]
```

####Age & Grade Range, Mean, SD

```r
#Range age
range(p6_data$age_official_confirm) #11-17
```

```
## [1] 11 17
```

```r
#Mean age
mean(p6_data$age_official_confirm) #13.13627
```

```
## [1] 13.13627
```

```r
#SD age
sd(p6_data$age_official_confirm) #1.536764
```

```
## [1] 1.536764
```

```r
#Range grade
range(p6_data$grade_2021) #6-11
```

```
## [1]  6 11
```

```r
#Mean grade
mean(p6_data$grade_2021) #7.654088
```

```
## [1] 7.654088
```

```r
#SD grade
sd(p6_data$grade_2021) #1.503445
```

```
## [1] 1.503445
```

####DSS Range, Mean, SD #####Total DSS

```r
#Range
range(p6_data$dss_total_avg) #1.055556 - 4.777778
```

```
## [1] 1.055556 4.777778
```

```r
#Mean
mean(p6_data$dss_total_avg) #2.06103
```

```
## [1] 2.06103
```

```r
#SD
sd(p6_data$dss_total_avg) #0.7669835
```

```
## [1] 0.7669835
```

#####Availability Stress

```r
#Range
range(p6_data$avail_stress) #1 - 5
```

```
## [1] 1 5
```

```r
#Mean
mean(p6_data$avail_stress) #1.912648
```

```
## [1] 1.912648
```

```r
#SD
sd(p6_data$avail_stress) #0.8645745
```

```
## [1] 0.8645745
```

#####Approval Anxiety

```r
#Range
range(p6_data$approval_anx) #1 - 5
```

```
## [1] 1 5
```

```r
#Mean
mean(p6_data$approval_anx) #2.066562
```

```
## [1] 2.066562
```

```r
#SD
sd(p6_data$approval_anx) #1.139737
```

```
## [1] 1.139737
```

#####Connection Overload

```r
#Range
range(p6_data$connect_overload) #1 - 5
```

```
## [1] 1 5
```

```r
#Mean
mean(p6_data$connect_overload) #1.889588
```

```
## [1] 1.889588
```

```r
#SD
sd(p6_data$connect_overload) #0.8481408
```

```
## [1] 0.8481408
```

#####FOMO

```r
#Range
range(p6_data$fomo) #1 - 5
```

```
## [1] 1 5
```

```r
#Mean
mean(p6_data$fomo) #1.940252
```

```
## [1] 1.940252
```

```r
#SD
sd(p6_data$fomo) #0.9168958
```

```
## [1] 0.9168958
```

#####Online Vigilance

```r
#Range
range(p6_data$online_vigil) #1 - 5
```

```
## [1] 1 5
```

```r
#Mean
mean(p6_data$online_vigil) #2.416143
```

```
## [1] 2.416143
```

```r
#SD
sd(p6_data$online_vigil) #0.9923771
```

```
## [1] 0.9923771
```

####PROMIS Anxiety Range, Mean, SD

```r
#Range
range(p6_data$promis_anx_sum) #4 - 20
```

```
## [1]  4 20
```

```r
#Mean
mean(p6_data$promis_anx_sum) #11.07547
```

```
## [1] 11.07547
```

```r
#SD
sd(p6_data$promis_anx_sum) #4.034849
```

```
## [1] 4.034849
```

####PROMIS Depression Range, Mean, SD

```r
#Range
range(p6_data$promis_dep_sum) #8 - 40
```

```
## [1]  8 40
```

```r
#Mean age
mean(p6_data$promis_dep_sum) #21.06709
```

```
## [1] 21.06709
```

```r
#SD age
sd(p6_data$promis_dep_sum) #8.575891
```

```
## [1] 8.575891
```

#Create and export CSV with filtered data ##Set new data folder path for this project

```
proj_data_dir = here() #Stay in the "digitalstress_p5_p6" folder
project_data_folder <- file.path(proj_data_dir, "data") #Path to the data folder for this project
```

#Create & name the CSV and save it in the data_folder (defined at the beginning of the script)

```
write.csv(p5_p6_fully_scored, here(project_data_folder, "p5_p6_dss_promis_fully_scored.csv"), row.names=
```