Project 2 – US births in 2014

MTH 161 - Fall 2024

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Part 1: choose a dataset and propose a question

Due Nov. 15th

For this project, we will investigate a dataset containing a sample of observations from 2014 of US births sourced from (https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/DVS/nata

In this investigation, we will determine if there is an association between the fathers age and the mothers age and whether it affects the babies overall weight when it is born.

For this model, we will use births14.csv data set.

```
library(tidyverse)
births14 <- read_csv("births14.csv")</pre>
```

Data

```
print(births14)
```

```
# A tibble: 1,000 x 13
    fage mage mature
                          weeks premie visits gained weight lowbirthweight sex
   <dbl> <dbl> <chr>
                                                <dbl>
                          <dbl> <chr>
                                         <dbl>
                                                      <dbl> <chr>
                                                                             <chr>>
      34
            34 younger m~
                             37 full ~
                                            14
                                                        6.96 not low
                                                                             male
 1
2
      36
            31 younger m~
                             41 full ~
                                            12
                                                   41
                                                        8.86 not low
                                                                             fema~
3
      37
            36 mature mom
                             37 full ~
                                            10
                                                   28
                                                        7.51 not low
                                                                             fema~
4
            16 younger m~
                             38 full ~
                                            NA
                                                   29
                                                        6.19 not low
     NA
                                                                             male
            31 younger m~
5
      32
                             36 premie
                                            12
                                                        6.75 not low
                                                   48
                                                                             fema~
6
      32
            26 younger m~
                             39 full ~
                                            14
                                                   45
                                                        6.69 not low
                                                                             fema~
```

```
36 premie
7
     37
           36 mature mom
                                           10
                                                  20
                                                       6.13 not low
                                                                           fema~
8
     29
           24 younger m~
                             40 full \sim
                                           13
                                                  65
                                                       6.74 not low
                                                                           male
                             39 full ~
9
     30
           32 younger m~
                                           15
                                                  25
                                                       8.94 not low
                                                                           fema~
           26 younger m~
                                                       9.12 not low
10
     29
                             39 full ~
                                           11
                                                  22
                                                                           male
```

i 990 more rows

i 3 more variables: habit <chr>, marital <chr>, whitemom <chr>

Note