BST270_Final_Proj

2025-01-22

R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

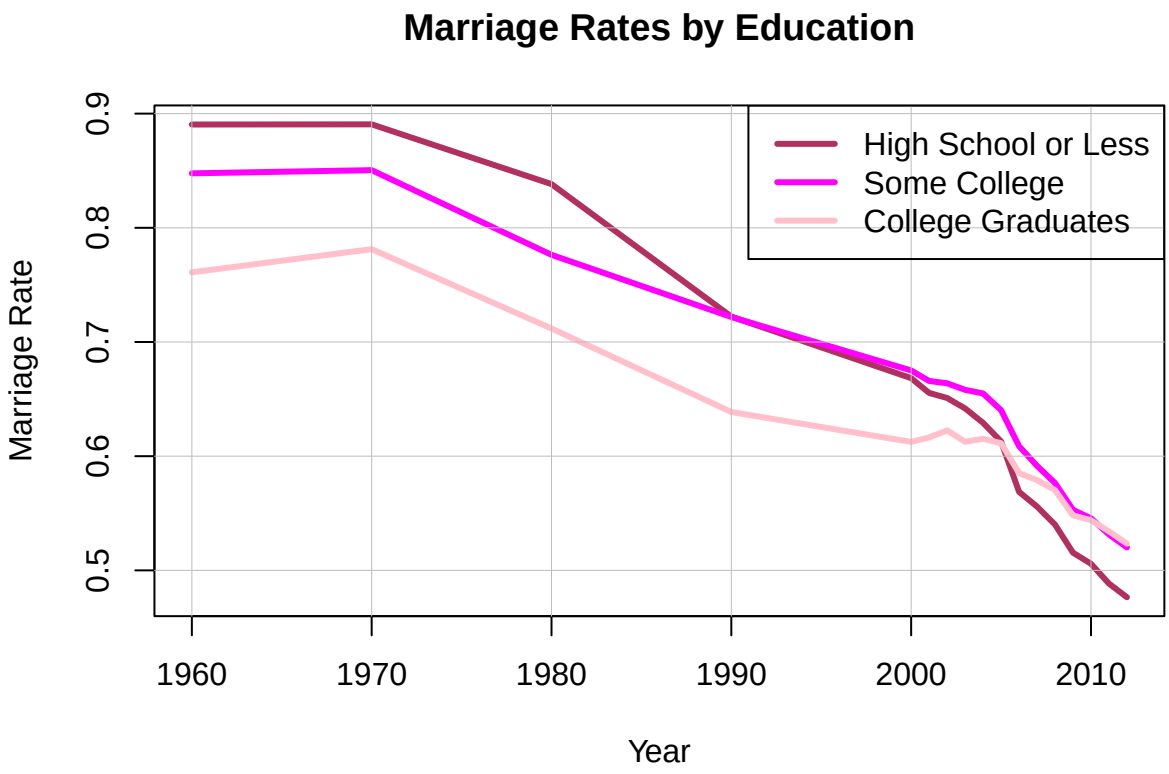
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
# read in data
both_sexes_df <- read.csv("./data/both_sexes.csv")
divorce_df <- read.csv("./data/divorce.csv")
men_df <- read.csv("./data/men.csv")
women_df <- read.csv("./data/women.csv")
```

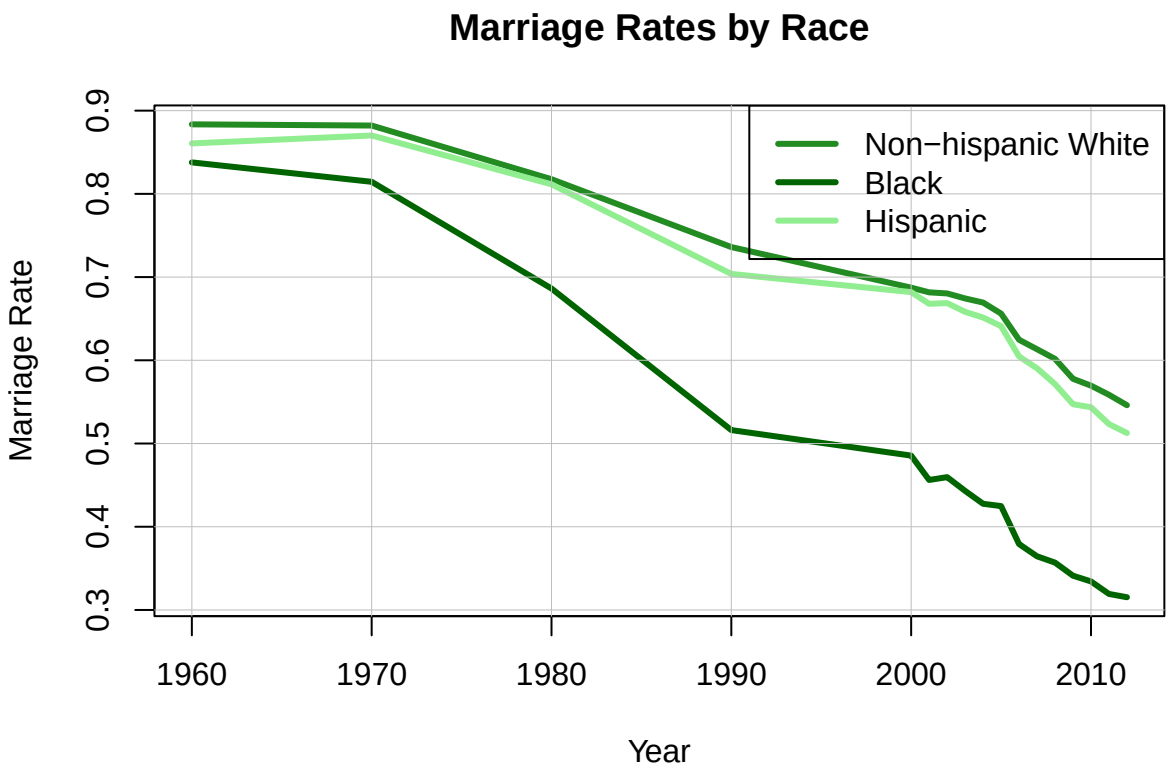
```
# Filter men.csv
both_sexes_edu_filt_df <- both_sexes_df[, c("year", "HS_2534",
                                            "SC_2534", "BAp_2534")]
both_sexes_edu_filt_df$HS_2534 <- 1- both_sexes_edu_filt_df$HS_2534
both_sexes_edu_filt_df$SC_2534 <- 1- both_sexes_edu_filt_df$SC_2534
both_sexes_edu_filt_df$BAp_2534 <- 1- both_sexes_edu_filt_df$BAp_2534

both_sexes_race_eth_filt_df <- both_sexes_df[, c("year", "White_2534",
                                                 "Black_2534", "Hisp_2534")]
both_sexes_race_eth_filt_df$White_2534 <- 1- both_sexes_race_eth_filt_df$White_2534
both_sexes_race_eth_filt_df$Black_2534 <- 1- both_sexes_race_eth_filt_df$Black_2534
both_sexes_race_eth_filt_df$Hisp_2534 <- 1- both_sexes_race_eth_filt_df$Hisp_2534
```

Figure 1:

```
matplot(both_sexes_edu_filt_df$year, cbind(both_sexes_edu_filt_df$HS_2534,
                                           both_sexes_edu_filt_df$SC_2534,
                                           both_sexes_edu_filt_df$BAp_2534),
        type = "l", lty = 1,lwd=3,
        col = c("maroon", "magenta", "pink"), xlab = "Year",
        ylab = "Marriage Rate", main = "Marriage Rates by Education")
grid(nx = NULL, ny = NULL,
     lty = 1,
     col = "gray",
     lwd = 0.5)
legend("topright", legend = c("High School or Less", "Some College",
                              "College Graduates"),
       col = c("maroon", "magenta", "pink"),
       lty = 1, lwd=3)
```




```
matplot(both_sexes_race_eth_filt_df$year, cbind(both_sexes_race_eth_filt_df$White_2534,
                                                both_sexes_race_eth_filt_df$Black_2534,
                                                both_sexes_race_eth_filt_df$Hisp_2534),
        type = "l", lty = 1,lwd=3,
        col = c("forestgreen", "darkgreen", "lightgreen"), xlab = "Year",
        ylab = "Marriage Rate", main = "Marriage Rates by Race")
grid(nx = NULL, ny = NULL,
     lty = 1,
     col = "gray",
     lwd = 0.5)
legend("topright", legend = c("Non-hispanic White", "Black", "Hispanic"),
       col = c("forestgreen", "darkgreen", "lightgreen"),
       lty = 1, lwd=3)
```


Marriage Rates by Race
Marriage Rate
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1960
1970
1980
1990
2000
2010
Year
Non−hispanic White
Black
Hispanic