

R Notebook

Loading of Data

```
library(tidyverse)
beauty <- read_csv("beauty.csv")
```

Filtering to only female respondents:

```
beauty_data <- beauty %>% filter(gender == "Female")
```

Demographic characteristics:

```
fivenum(beauty_data$age)
```

```
## [1] 18 20 20 21 30
```

```
unique(beauty_data$faculty)
```

```
## [1] "Business" "CHS"      "CDE"      "Law"      "SOC"      "Medicine"
```

```
fivenum(beauty_data$tiktok_hours)
```

```
## [1] 0.0 0.5 1.5 2.0 6.0
```

```
beauty_data %>% mutate(beauty_index = tiktok_hours*frequency) -> beauty_data
```

T-tests between IV and DVs

First, split respondents into two groups: those who do not consume beauty content on Tiktok (ie. Watched Hours = 0 + Tiktoks related to beauty answer “not at all”), and those who do.

```
beauty_false <- beauty_data %>% filter(tiktok_hours == 0 | frequency == 1)
beauty_true <- setdiff(beauty_data, beauty_false)
```

Then, compare means of dependent variables.

For self-esteem, our hypothesis is that the self-esteems of those who consume beauty content are lower than those who do not. $t = 1.2579$, $p = 0.8907$. Hence, the longer-term self-esteems of those who consume beauty content is not significantly lesser than those who do not.

```
t.test(quality_true$high_self_esteem, quality_false$high_self_esteem, alternative = "less")
```

```
##
## Welch Two Sample t-test
##
## data:  quality_true$high_self_esteem and quality_false$high_self_esteem
## t = 1.2579, df = 28.488, p-value = 0.8907
## alternative hypothesis: true difference in means is less than 0
## 95 percent confidence interval:
##      -Inf 0.8336102
## sample estimates:
## mean of x mean of y
##  3.259259  2.904762
```

For appearance anxiety, our hypothesis is that those who consume beauty content experience more appearance anxiety than those who do not. $t = 1.0299$, $p\text{-value} = 0.156$. Hence, the longer-term appearance anxiety of those who consume beauty content is not significantly greater than those who do not.

```
t.test(quality_true$anxiety, quality_false$anxiety, alternative = "greater")
```

```
##
## Welch Two Sample t-test
##
## data:  quality_true$anxiety and quality_false$anxiety
## t = 1.0299, df = 27.477, p-value = 0.156
## alternative hypothesis: true difference in means is greater than 0
## 95 percent confidence interval:
##  -0.1876606      Inf
## sample estimates:
## mean of x mean of y
##  3.049383  2.761905
```

For mood, our hypothesis is that those who consume beauty content have their moods more negatively affected by such content than those who do not. $t = 2.9167$, $p\text{-value} = 0.003428$. Hence, the moods of those who consume beauty content are significantly more negatively affected than those who do not.

```
t.test(mood_true$negative_mood, mood_false$negative_mood, alternative = "greater")
```

```
##
## Welch Two Sample t-test
##
## data:  mood_true$negative_mood and mood_false$negative_mood
## t = 2.9167, df = 28.284, p-value = 0.003428
## alternative hypothesis: true difference in means is greater than 0
## 95 percent confidence interval:
##  0.5463918      Inf
## sample estimates:
## mean of x mean of y
##  3.691358  2.380952
```

Simple Linear Regression between IV and DVs

```
beauty_mood <- lm(negative_mood ~ beauty_index, data = beauty_data)
summary(beauty_mood)
```

```
##
## Call:
## lm(formula = negative_mood ~ beauty_index, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -3.2078 -1.3990 -0.2912  1.2431  3.7088
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   2.85986    0.24223   11.806 < 2e-16 ***
## beauty_index   0.10784    0.03372    3.198  0.00185 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.685 on 100 degrees of freedom
## Multiple R-squared:  0.09279,    Adjusted R-squared:  0.08372
## F-statistic: 10.23 on 1 and 100 DF,  p-value: 0.001853
```

```
beauty_anxiety <- lm(anxiety ~ beauty_index, data = beauty_data)
summary(beauty_anxiety)
```

```
##
## Call:
## lm(formula = anxiety ~ beauty_index, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.35412 -0.82380  0.07101  0.87049  2.26979
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   2.73021    0.14289   19.107 <2e-16 ***
## beauty_index   0.04991    0.01989    2.509  0.0137 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.9938 on 100 degrees of freedom
## Multiple R-squared:  0.05924,    Adjusted R-squared:  0.04983
## F-statistic: 6.297 on 1 and 100 DF,  p-value: 0.0137
```

```
beauty_esteem <- lm(high_self_esteem ~ beauty_index, data = beauty_data)
summary(beauty_esteem)
```

```
##
## Call:
```

```
## lm(formula = high_self_esteem ~ beauty_index, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.2994 -0.9223 -0.1261  0.8277  1.8623
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   3.12612    0.15427  20.264  <2e-16 ***
## beauty_index   0.01155    0.02147   0.538    0.592
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.073 on 100 degrees of freedom
## Multiple R-squared:  0.002884, Adjusted R-squared:  -0.007087
## F-statistic: 0.2892 on 1 and 100 DF, p-value: 0.5919
```

```
beauty_jealousy <- lm(jealousy ~ beauty_index, data = beauty_data)
summary(beauty_jealousy)
```

```
##
## Call:
## lm(formula = jealousy ~ beauty_index, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -3.4580 -1.1494  0.1264  1.0486  3.3412
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   3.05092    0.21991  13.874  < 2e-16 ***
## beauty_index   0.11257    0.03061   3.677 0.000382 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.53 on 100 degrees of freedom
## Multiple R-squared:  0.1191, Adjusted R-squared:  0.1103
## F-statistic: 13.52 on 1 and 100 DF, p-value: 0.0003816
```

```
beauty_comparison <- lm(comparison ~ beauty_index, data = beauty_data)
summary(beauty_comparison)
```

```
##
## Call:
## lm(formula = comparison ~ beauty_index, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -3.7178 -1.4701  0.3362  1.2799  3.6304
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   3.36958    0.24378  13.822  < 2e-16 ***
```

```
## beauty_index 0.10785 0.03393 3.178 0.00197 **
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.696 on 100 degrees of freedom
## Multiple R-squared: 0.09175, Adjusted R-squared: 0.08267
## F-statistic: 10.1 on 1 and 100 DF, p-value: 0.001971
```

```
beauty_self_esteem_after <- lm(self_esteem_awareness ~ beauty_index, data = beauty_data)
summary(beauty_self_esteem_after)
```

```
##
## Call:
## lm(formula = self_esteem_awareness ~ beauty_index, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.24681 -0.83491  0.08664  0.77281  2.24355
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   2.75645    0.14521  18.983  <2e-16 ***
## beauty_index   0.03923    0.02021   1.941  0.0551 .
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.01 on 100 degrees of freedom
## Multiple R-squared: 0.0363, Adjusted R-squared: 0.02666
## F-statistic: 3.766 on 1 and 100 DF, p-value: 0.05511
```

```
beauty_anxiety_after <- lm(anxiety_after ~ beauty_index, data = beauty_data)
summary(beauty_anxiety_after)
```

```
##
## Call:
## lm(formula = anxiety_after ~ beauty_index, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -3.5446 -1.1956  0.0614  1.0614  3.3676
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   2.93862    0.22417  13.109  < 2e-16 ***
## beauty_index   0.12848    0.03121   4.117  7.9e-05 ***
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.559 on 100 degrees of freedom
## Multiple R-squared: 0.1449, Adjusted R-squared: 0.1364
## F-statistic: 16.95 on 1 and 100 DF, p-value: 7.901e-05
```

Confounders

We have identified consumption of beauty content from other platforms outside of Tiktok as a possible confounder for the correlations between our IV and DVs. Our confounder hence becomes the variable of the number of other platforms used outside of Tiktok, found through mutating a new column from the data in `beauty_data$platforms`.

```
mutate(beauty_data, other_platforms = str_remove_all(beauty_data$platforms,
  "Tiktok/ Douyin;")) -> beauty_data
mutate(beauty_data, other_platforms = str_remove_all(beauty_data$other_platforms,
  "Tiktok/ Douyin")) -> beauty_data
beauty_data$other_platforms[beauty_data$other_platforms == ""] <- NA
beauty_data$other_platforms <- trimws(beauty_data$other_platforms,
  "r", whitespace = ";")
mutate(beauty_data, n_other_platforms = str_count(beauty_data$other_platforms,
  ";") + 1) -> beauty_data
```

```
beauty_anxiety_conf <- lm(anxiety ~ beauty_index + n_other_platforms, data = beauty_data)
summary(beauty_anxiety_conf)
```

```
##
## Call:
## lm(formula = anxiety ~ beauty_index + n_other_platforms, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.36309 -0.83710  0.07545  0.84464  2.21393
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)      2.90507     0.31135   9.331 5.85e-15 ***
## beauty_index      0.04616     0.02057   2.245  0.0272 *
## n_other_platforms -0.05950     0.14013  -0.425  0.6721
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.009 on 92 degrees of freedom
## (7 observations deleted due to missingness)
## Multiple R-squared:  0.05344,    Adjusted R-squared:  0.03287
## F-statistic: 2.597 on 2 and 92 DF,  p-value: 0.07993
```

```
beauty_esteem_conf <- lm(high_self_esteem ~ beauty_index + n_other_platforms, data = beauty_data)
summary(beauty_esteem_conf)
```

```
##
## Call:
## lm(formula = high_self_esteem ~ beauty_index + n_other_platforms,
##      data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.6787 -0.4729  0.1080  0.7566  1.7543
```

```
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    2.59013    0.31863   8.129 1.94e-12 ***
## beauty_index    0.01524    0.02105   0.724  0.4707
## n_other_platforms 0.28664    0.14340   1.999  0.0486 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.032 on 92 degrees of freedom
## (7 observations deleted due to missingness)
## Multiple R-squared:  0.0472, Adjusted R-squared:  0.02649
## F-statistic: 2.279 on 2 and 92 DF, p-value: 0.1081
```

```
# Identifying if there is R/S between n_other_platforms and
# beauty_index since confounders usually entail R/S between
# confounder, IV, DV.
beauty_index_platforms <- lm(n_other_platforms ~ beauty_index,
  data = beauty_data)
summary(beauty_index_platforms)
```

```
##
## Call:
## lm(formula = n_other_platforms ~ beauty_index, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.96308 -0.94982  0.04071  0.05207  2.05207
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    1.947926    0.110828  17.576 <2e-16 ***
## beauty_index    0.001894    0.015217   0.124  0.901
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.7465 on 93 degrees of freedom
## (7 observations deleted due to missingness)
## Multiple R-squared:  0.0001665, Adjusted R-squared:  -0.01058
## F-statistic: 0.01549 on 1 and 93 DF, p-value: 0.9012
```

```
beauty_index_platforms2 <- lm(beauty_index ~ n_other_platforms,
  data = beauty_data)
summary(beauty_index_platforms2)
```

```
##
## Call:
## lm(formula = beauty_index ~ n_other_platforms, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -5.444 -4.180 -1.268  2.732 18.732
##
```

```
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    5.09208    1.47838   3.444 0.00086 ***
## n_other_platforms 0.08792    0.70648   0.124 0.90123
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 5.086 on 93 degrees of freedom
## (7 observations deleted due to missingness)
## Multiple R-squared:  0.0001665, Adjusted R-squared:  -0.01058
## F-statistic: 0.01549 on 1 and 93 DF,  p-value: 0.9012
```

We do not repeat the test for confounders on the single linear regression model between beauty Tiktok consumption and mood because the question for that set of observations surveys for a cause and effect relationship between Tiktok consumption specifically and mood (“negative changes in your mood (e.g., increased sadness or self consciousness) *after* watching beauty TikTok video”) for non-neutral answers.

Antecedent vs Post-Tiktok levels of anxiety and self-esteem

```
beauty_index_anxiety_controlled <- lm(anxiety_after ~ beauty_index + anxiety, data = beauty_data)
summary(beauty_index_anxiety_controlled)
```

```
##
## Call:
## lm(formula = anxiety_after ~ beauty_index + anxiety, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -3.0200 -0.8868  0.0469  1.0500  3.2806
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    1.01479    0.43411   2.338  0.02142 *
## beauty_index    0.09331    0.02889   3.230  0.00168 **
## anxiety         0.70464    0.14088   5.002 2.46e-06 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.4 on 99 degrees of freedom
## Multiple R-squared:  0.3174, Adjusted R-squared:  0.3036
## F-statistic: 23.02 on 2 and 99 DF,  p-value: 6.166e-09
```

```
anxiety_anxiety_after <- lm(anxiety_after ~ anxiety, data = beauty_data)
summary(anxiety_anxiety_after)
```

```
##
## Call:
## lm(formula = anxiety_after ~ anxiety, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
```



```
## -3.4312 -0.8004 0.2919 1.1534 3.1996
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)  1.1697      0.4513   2.592   0.011 *
## anxiety      0.8154      0.1429   5.704 1.19e-07 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.465 on 100 degrees of freedom
## Multiple R-squared:  0.2455, Adjusted R-squared:  0.238
## F-statistic: 32.54 on 1 and 100 DF, p-value: 1.191e-07
```

```
beauty_index_selfesteem_controlled <- lm(self_esteem_awareness ~ beauty_index + high_self_esteem, data = beauty_data)
summary(beauty_index_selfesteem_controlled)
```

```
##
## Call:
## lm(formula = self_esteem_awareness ~ beauty_index + high_self_esteem,
##     data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.03830 -0.71648  0.06663  0.73255  2.46263
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)  3.50007      0.31908  10.969 <2e-16 ***
## beauty_index  0.04198      0.01968   2.132  0.0354 *
## high_self_esteem -0.23787      0.09153  -2.599  0.0108 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.9821 on 99 degrees of freedom
## Multiple R-squared:  0.09785, Adjusted R-squared:  0.07962
## F-statistic: 5.369 on 2 and 99 DF, p-value: 0.006115
```

```
beauty_index_inadequacy_controlled <- lm(jealousy ~ beauty_index + high_self_esteem, data = beauty_data)
summary(beauty_index_inadequacy_controlled)
```

```
##
## Call:
## lm(formula = jealousy ~ beauty_index + high_self_esteem, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -3.1072 -1.1718  0.0177  1.1160  3.7087
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)  3.6850      0.4944   7.454 3.47e-11 ***
## beauty_index  0.1149      0.0305   3.768 0.00028 ***
## high_self_esteem -0.2029      0.1418  -1.430 0.15575
```

```
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.522 on 99 degrees of freedom
## Multiple R-squared:  0.137, Adjusted R-squared:  0.1195
## F-statistic: 7.855 on 2 and 99 DF, p-value: 0.0006819
```

Construct validity/Agreement between questions

Mood: hypothesis: correlation between beauty index and positive mood from tiktok should be inverse of correlation between beauty index and negative mood from tiktok

```
beauty_positive_mood <- lm(positive_mood ~ beauty_index, data = beauty_data)
summary(beauty_positive_mood)
```

```
##
## Call:
## lm(formula = positive_mood ~ beauty_index, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.1333 -0.8543  0.1010  0.5609  2.0341
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   2.85432     0.12001   23.785  <2e-16 ***
## beauty_index    0.02232     0.01671    1.336    0.185
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.8347 on 100 degrees of freedom
## Multiple R-squared:  0.01754, Adjusted R-squared:  0.007717
## F-statistic: 1.785 on 1 and 100 DF, p-value: 0.1845
```

```
beauty_mood <- lm(negative_mood ~ beauty_index, data = beauty_data)
summary(beauty_mood)
```

```
##
## Call:
## lm(formula = negative_mood ~ beauty_index, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -3.2078 -1.3990 -0.2912  1.2431  3.7088
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   2.85986     0.24223   11.806  < 2e-16 ***
## beauty_index    0.10784     0.03372    3.198  0.00185 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
```

```
## Residual standard error: 1.685 on 100 degrees of freedom
## Multiple R-squared:  0.09279,    Adjusted R-squared:  0.08372
## F-statistic: 10.23 on 1 and 100 DF,  p-value: 0.001853
```

Self-esteem: hypothesis: correlation between beauty index effect on detrimental mood after tiktok and correlation between beauty index effect on pressured to change oneself/

```
beauty_positive_mood <- lm(positive_mood ~ beauty_index, data = beauty_data)
summary(beauty_positive_mood)
```

```
##
## Call:
## lm(formula = positive_mood ~ beauty_index, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.1333 -0.8543  0.1010  0.5609  2.0341
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   2.85432    0.12001   23.785  <2e-16 ***
## beauty_index   0.02232    0.01671    1.336    0.185
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.8347 on 100 degrees of freedom
## Multiple R-squared:  0.01754,    Adjusted R-squared:  0.007717
## F-statistic: 1.785 on 1 and 100 DF,  p-value: 0.1845
```

```
beauty_unrealistic <- lm(unrealistic ~ beauty_index, data = beauty_data)
summary(beauty_unrealistic)
```

```
##
## Call:
## lm(formula = unrealistic ~ beauty_index, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.6175 -0.6182  0.3805  0.3860  1.3886
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   3.6206846  0.1409358   25.69  <2e-16 ***
## beauty_index -0.0005832  0.0196184   -0.03    0.976
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.9802 on 100 degrees of freedom
## Multiple R-squared:  8.836e-06,    Adjusted R-squared:  -0.009991
## F-statistic: 0.0008836 on 1 and 100 DF,  p-value: 0.9763
```

```
beauty_unhealthy <- lm(unhealthy ~ beauty_index, data = beauty_data)
summary(beauty_unhealthy)
```

```
##
## Call:
## lm(formula = unhealthy ~ beauty_index, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.3308 -0.4991 -0.2257  0.6709  1.7743
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   3.50607    0.13884  25.252  <2e-16 ***
## beauty_index  -0.03504    0.01933  -1.813   0.0728 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.9657 on 100 degrees of freedom
## Multiple R-squared:  0.03183,    Adjusted R-squared:  0.02215
## F-statistic: 3.288 on 1 and 100 DF,  p-value: 0.0728
```

```
beauty_pressure <- lm(pressure ~ beauty_index, data = beauty_data)
summary(beauty_pressure)
```

```
##
## Call:
## lm(formula = pressure ~ beauty_index, data = beauty_data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.7194 -0.9198  0.1524  0.9818  2.0008
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   2.77181    0.16255  17.05  < 2e-16 ***
## beauty_index   0.07580    0.02263   3.35  0.00114 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.131 on 100 degrees of freedom
## Multiple R-squared:  0.1009, Adjusted R-squared:  0.09192
## F-statistic: 11.22 on 1 and 100 DF,  p-value: 0.00114
```

```
unrealistic_unhealthy_anxiety_after <- lm(anxiety_after ~ unrealistic + unhealthy, data = beauty_data)
summary(unrealistic_unhealthy_anxiety_after)
```

```
##
## Call:
## lm(formula = anxiety_after ~ unrealistic + unhealthy, data = beauty_data)
##
```

```

## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.7532 -1.5282  0.3513  1.3191  3.7933
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  3.32749    0.73783   4.510 1.78e-05 ***
## unrealistic  0.13661    0.18733   0.729  0.468
## unhealthy   -0.06434    0.18710  -0.344  0.732
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.69 on 99 degrees of freedom
## Multiple R-squared:  0.005384,    Adjusted R-squared:  -0.01471
## F-statistic: 0.2679 on 2 and 99 DF,  p-value: 0.7655

```