# Results

## Reliability Analysis

Scale Reliability Statistics
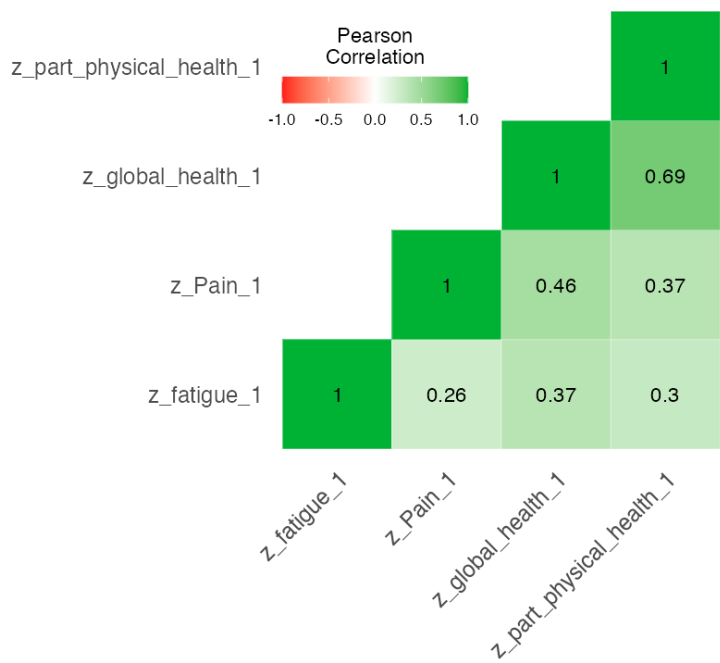
|  | Mean | SD | Cronbach's α | McDonald's ω |
|---|---|---|---|---|
| scale | 0.00112 | 0.747 | 0.733 | 0.755 |

**[3]**

Item Reliability Statistics

|  | Mean | SD | Item-rest correlation | If item dropped | |
|---|---|---|---|---|---|
|  |  |  |  | Cronbach's α | McDonald's ω |
| z_fatigue_1 | 0.00819 | 1.003 | 0.374 | 0.755 | 0.779 |
| z_Pain_1 | 0.00106 | 1.000 | 0.454 | 0.712 | 0.751 |
| z_global_health_1 | -0.00719 | 1.003 | 0.689 | 0.572 | 0.578 |
| z_part_physical_health_1 | 0.00240 | 1.005 | 0.599 | 0.628 | 0.647 |

## Correlation Heatmap



## Reliability Analysis_MentalHealth

Scale Reliability Statistics

|  | Mean | SD | Cronbach's α | McDonald's ω |
|---|---|---|---|---|
| scale | 9.84e-4 | 0.814 | 0.872 | 0.874 |

**[3]**

Item Reliability Statistics

| | Mean | SD | Item-rest correlation | If item dropped | |
|---|---|---|---|---|---|
| | | | | Cronbach's α | McDonald's ω |
| z_ladder_1 | -1.69e -4 | 1.002 | 0.622 | 0.863 | 0.865 |
| z_wellbeing_1 | 0.00293 | 1.001 | 0.764 | 0.828 | 0.834 |
| z_mental_health_1 | 4.90e -4 | 1.002 | 0.774 | 0.826 | 0.830 |
| z_pss_1 | 0.00167 | 1.002 | 0.711 | 0.841 | 0.844 |
| z_global_health_1 | 1.04e-16 | 1.000 | 0.624 | 0.862 | 0.864 |

## Correlation Heatmap
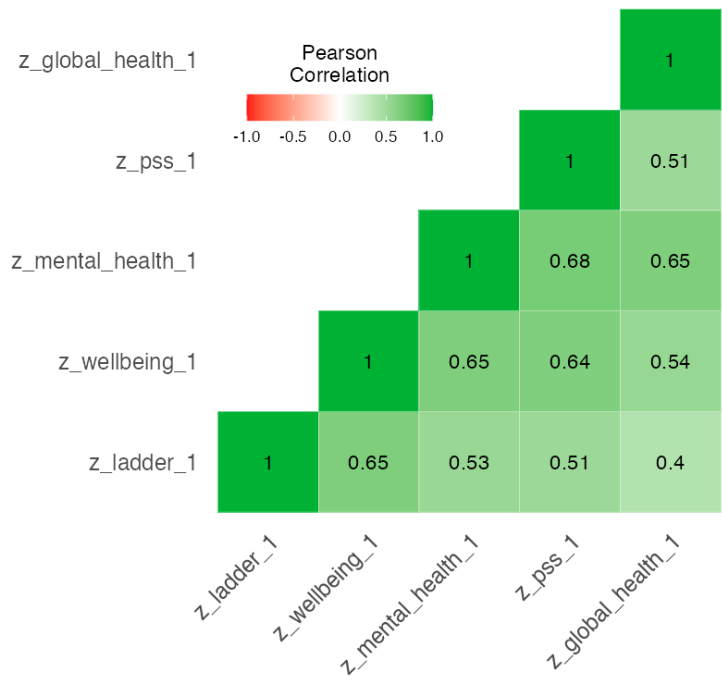


## Reliability Analysis

Scale Reliability Statistics

| | Mean | SD | Cronbach's α | McDonald's ω |
|---|---|---|---|---|
| scale | . | . | . | . |

[3]

Item Reliability Statistics

| | Mean | SD | Item-rest correlation | If item dropped | |
|---|---|---|---|---|---|
| | | | | Cronbach's α | McDonald's ω |

## Correlation Heatmap

## Reliability Analysis_Total

Scale Reliability Statistics

|  | Mean | SD | Cronbach's α | McDonald's ω |
|---|---|---|---|---|
| scale | 0.00168 | 0.757 | 0.921 | 0.926 |

[3]

Item Reliability Statistics

|  |  |  |  | If item dropped | |
|---|---|---|---|---|---|
|  | Mean | SD | Item-rest correlation | Cronbach's α | McDonald's ω |
| z_part_physical_health_1 | 0.00240 | 1.005 | 0.711 | 0.913 | 0.919 |
| z_ladder_1 | -0.00773 | 1.001 | 0.626 | 0.918 | 0.923 |
| z_Full_Mental_Health_1 | 0.00269 | 0.848 | 0.921 | 0.903 | 0.907 |
| z_wellbeing_1 | 0.01176 | 1.005 | 0.779 | 0.909 | 0.915 |
| z_mental_health_1 | -0.00103 | 1.010 | 0.796 | 0.908 | 0.914 |
| z_pss_1 | 0.00777 | 1.004 | 0.728 | 0.912 | 0.918 |
| z_fatigue_1 | 0.00819 | 1.003 | 0.497 | 0.925 | 0.929 |
| z_Pain_1 | 0.00106 | 1.000 | 0.488 | 0.925 | 0.930 |
| z_global_health_1 | -0.00719 | 1.003 | 0.740 | 0.911 | 0.918 |
| z_Full_Physical_health | -0.00116 | 1.005 | 0.791 | 0.908 | 0.915 |

# Correlation Heatmap
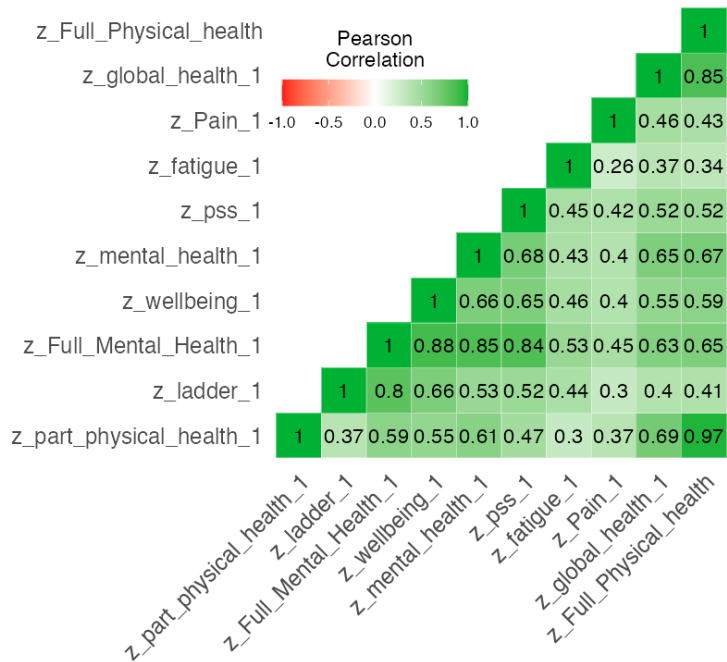


# Linear Regression_TikTok_Mental

Model Fit Measures

| Model | R | R² | Adjusted R² | AIC | BIC | RMSE | Overall Model Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  | F | df1 | df2 | p |
| 1 | 0.206 | 0.0424 | 0.0251 | 564 | 585 | 0.821 | 2.45 | 4 | 221 | 0.047 |

Model Coefficients - z_Full_Mental_Health_1

| Predictor | Estimate | SE | 95% Confidence Interval | | t | p | Stand. Estimate | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Lower | Upper | | | | Lower | Upper |
| Intercept | 0.12698 | 0.08170 | -0.03403 | 0.28799 | 1.554 | 0.122 | | | |
| Activity_1_TikTok | 8.16e-4 | 0.00212 | -0.00337 | 0.00500 | 0.385 | 0.701 | 0.0310 | -0.1278 | 0.1898 |
| Social_Connection_1_TikTok | 0.00479 | 0.00387 | -0.00283 | 0.01241 | 1.238 | 0.217 | 0.0926 | -0.0548 | 0.2400 |
| Social_Activity_1_TikTok | -0.00821 | 0.00375 | -0.01560 | -8.19e-4 | -2.189 | 0.030 | -0.1947 | -0.3699 | -0.0194 |
| Relaxation_1_TikTok | -0.00157 | 0.00156 | -0.00464 | 0.00151 | -1.004 | 0.316 | -0.0819 | -0.2425 | 0.0788 |

## Assumption Checks

Collinearity Statistics

| | VIF | Tolerance |
|---|---|---|
| Activity_1_TikTok | 1.50 | 0.667 |
| Social_Connection_1_TikTok | 1.29 | 0.774 |
| Social_Activity_1_TikTok | 1.83 | 0.548 |
| Relaxation_1_TikTok | 1.53 | 0.652 |

[4]

Normality Test (Shapiro-Wilk)

| Statistic | p |
|---|---|
| 0.992 | 0.265 |

**Q-Q Plot**
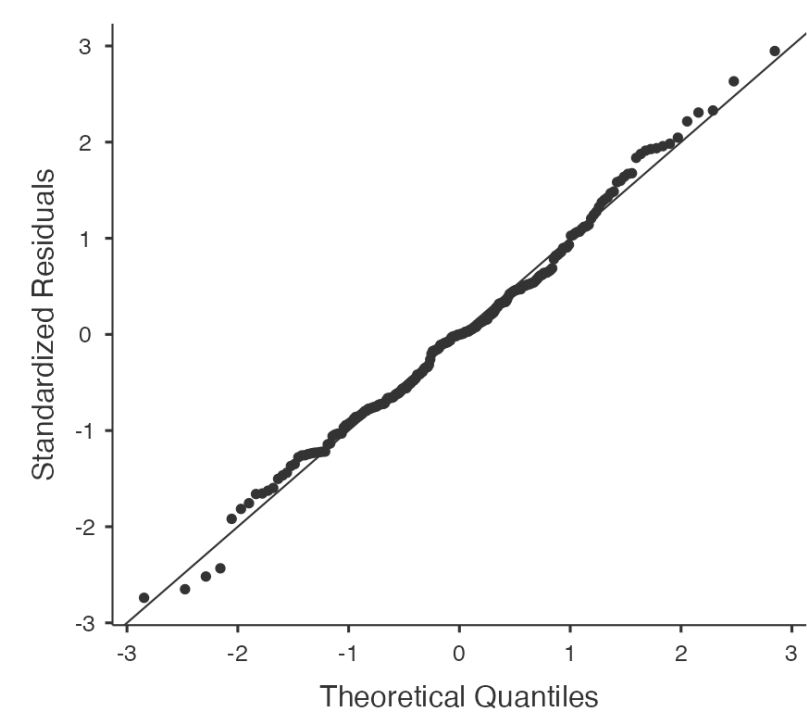


## Linear Regression_TikTok_FullPhysicalHealth

Model Fit Measures

| Model | R | R² | Adjusted R² | AIC | BIC | RMSE | F | df1 | df2 | p |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Overall Model Test | | | |
| 1 | 0.171 | 0.0293 | 0.0117 | 646 | 666 | 0.983 | 1.67 | 4 | 221 | 0.158 |

Model Coefficients - z_Full_Physical_health

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | 0.12145 | 0.09778 | 1.2421 | 0.216 |
| Activity_1_TikTok | -0.00409 | 0.00254 | -1.6080 | 0.109 |
| Social_Connection_1_TikTok | 0.00225 | 0.00463 | 0.4851 | 0.628 |
| Social_Activity_1_TikTok | -0.00402 | 0.00449 | -0.8948 | 0.372 |
| Relaxation_1_TikTok | 1.13e-4 | 0.00187 | 0.0606 | 0.952 |

## Assumption Checks

Normality Test (Shapiro-Wilk)

| Statistic | p |
|---|---|
| 0.983 | 0.008 |

**Q-Q Plot**
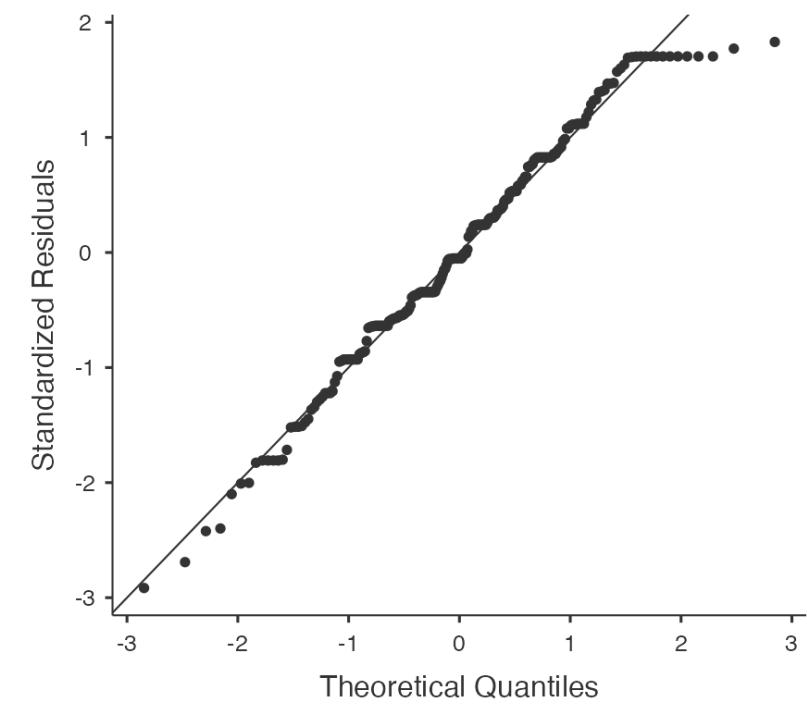


## Linear Regression_TikTok_Fatigue

Model Fit Measures

| Model | R | R² |
|---|---|---|
| 1 | 0.100 | 0.0101 |

Model Coefficients - z_fatigue_1

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | 0.03871 | 0.09972 | 0.388 | 0.698 |
| Activity_1_TikTok | -6.42e-4 | 0.00257 | -0.250 | 0.803 |
| Social_Connection_1_TikTok | -0.00166 | 0.00467 | -0.354 | 0.723 |
| Social_Activity_1_TikTok | -0.00459 | 0.00453 | -1.013 | 0.312 |
| Relaxation_1_TikTok | 0.00112 | 0.00189 | 0.590 | 0.556 |

# Linear Regression_TikTok_Pain

Model Fit Measures

| Model | R | $R^2$ |
|---|---|---|
| 1 | 0.0857 | 0.00734 |

Model Coefficients - z_Pain_1

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | 0.00759 | 0.09922 | 0.0765 | 0.939 |
| Activity_1_TikTok | 0.00160 | 0.00258 | 0.6220 | 0.535 |
| Social_Connection_1_TikTok | -0.00493 | 0.00474 | -1.0389 | 0.300 |
| Social_Activity_1_TikTok | -7.38e-4 | 0.00454 | -0.1626 | 0.871 |
| Relaxation_1_TikTok | 1.23e-4 | 0.00190 | 0.0646 | 0.949 |

# Linear Regression_YouTube_MentalHealth

Model Fit Measures

| Model | R | $R^2$ | Adjusted $R^2$ | AIC | BIC | RMSE | Overall Model Test F | df1 | df2 | p |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.201 | 0.0403 | 0.0185 | 567 | 591 | 0.822 | 1.85 | 5 | 220 | 0.105 |

Omnibus ANOVA Test

| | Sum of Squares | df | Mean Square | F | p |
|---|---|---|---|---|---|
| Academic_1_Youtube | 0.17542 | 1 | 0.17542 | 0.25255 | 0.616 |
| Activity_1_YouTube | 0.32727 | 1 | 0.32727 | 0.47115 | 0.493 |
| Social_Connection_1_YouTube | 2.66500 | 1 | 2.66500 | 3.83669 | 0.051 |
| Social_Activity_1_YouTube | 2.55103 | 1 | 2.55103 | 3.67260 | 0.057 |
| Relaxation_1_YouTube | 0.00192 | 1 | 0.00192 | 0.00277 | 0.958 |
| Residuals | 152.81422 | 220 | 0.69461 | | |

*Note.* Type 3 sum of squares

[4]

Model Coefficients - z_Full_Mental_Health_1

| Predictor | Estimate | SE | 95% Confidence Interval | | t | p | Stand. Estimate | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Lower | Upper | | | | Lower | Upper |
| Intercept | 0.05135 | 0.09927 | -0.14429 | 0.24698 | 0.5172 | 0.606 | | | |
| Academic_1_Youtube | -0.00132 | 0.00263 | -0.00650 | 0.00386 | -0.5025 | 0.616 | -0.03388 | -0.167 | 0.09898 |
| Activity_1_YouTube | 0.00197 | 0.00287 | -0.00368 | 0.00762 | 0.6864 | 0.493 | 0.05501 | -0.103 | 0.21295 |
| Social_Connection_1_YouTube | 0.01182 | 0.00604 | -7.28e−5 | 0.02372 | 1.9587 | 0.051 | 0.13014 | -8.01e−4 | 0.26109 |
| Social_Activity_1_YouTube | -0.00990 | 0.00517 | -0.02009 | 2.81e-4 | -1.9164 | 0.057 | -0.16030 | -0.325 | 0.00455 |
| Relaxation_1_YouTube | 8.62e-5 | 0.00164 | -0.00314 | 0.00331 | 0.0526 | 0.958 | 0.00420 | -0.153 | 0.16149 |

## Assumption Checks

Normality Test (Shapiro-Wilk)

| Statistic | p |
|---|---|
| 0.992 | 0.280 |

**Q-Q Plot**
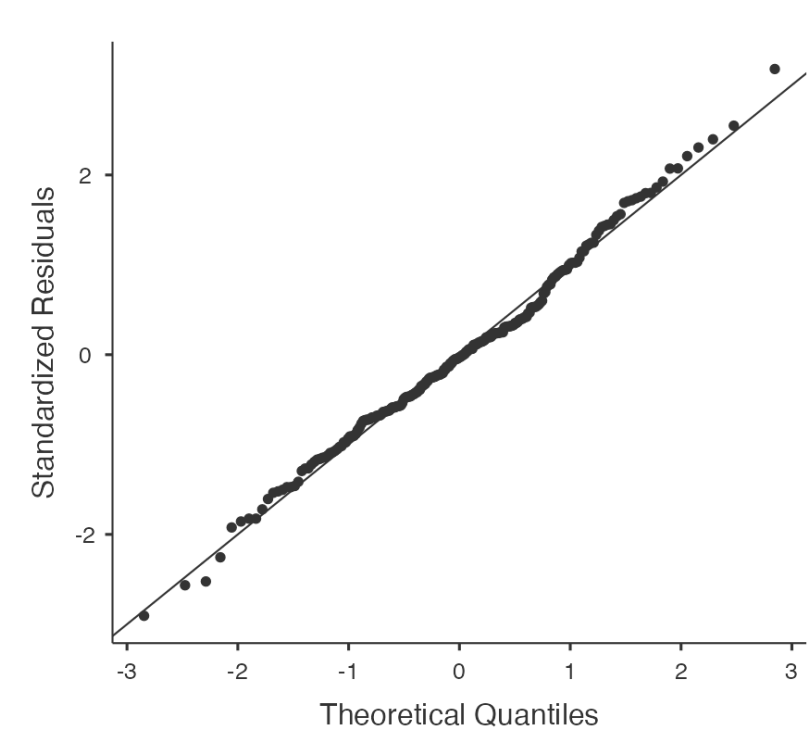


## Linear Regression_Youtube_PhysicalHealth

Model Fit Measures

| Model | R | R² |
|---|---|---|
| 1 | 0.122 | 0.0149 |

Model Coefficients - z_Full_Physical_health

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | 0.09132 | 0.11955 | 0.7639 | 0.446 |
| Academic_1_Youtube | -2.57e–4 | 0.00317 | -0.0812 | 0.935 |
| Activity_1_YouTube | 9.26e-5 | 0.00345 | 0.0268 | 0.979 |
| Social_Connection_1_YouTube | 0.00662 | 0.00727 | 0.9100 | 0.364 |
| Social_Activity_1_YouTube | -0.00651 | 0.00622 | -1.0451 | 0.297 |
| Relaxation_1_YouTube | -6.27e–4 | 0.00197 | -0.3178 | 0.751 |

# Linear Regression_Youtube_Fatigue

Model Fit Measures

| Model | R | R² |
|---|---|---|
| 1 | 0.139 | 0.0194 |

Model Coefficients - z_fatigue_1

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | 0.13510 | 0.12016 | 1.124 | 0.262 |
| Academic_1_Youtube | -0.00222 | 0.00316 | -0.704 | 0.482 |
| Activity_1_YouTube | 8.62e-4 | 0.00345 | 0.250 | 0.803 |
| Social_Connection_1_YouTube | -0.00274 | 0.00820 | -0.334 | 0.739 |
| Social_Activity_1_YouTube | -0.00820 | 0.00621 | -1.320 | 0.188 |
| Relaxation_1_YouTube | -8.15e–4 | 0.00198 | -0.413 | 0.680 |

# Linear Regression_Youtube_Pain

Model Fit Measures

| Model | R | R² |
|---|---|---|
| 1 | 0.111 | 0.0122 |

Model Coefficients - z_Pain_1

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | -0.03656 | 0.12060 | -0.303 | 0.762 |
| Academic_1_Youtube | -0.00112 | 0.00317 | -0.354 | 0.724 |
| Activity_1_YouTube | -0.00175 | 0.00346 | -0.505 | 0.614 |
| Social_Connection_1_YouTube | -0.00208 | 0.00728 | -0.286 | 0.775 |
| Social_Activity_1_YouTube | -0.00708 | 0.00625 | -1.133 | 0.259 |
| Relaxation_1_YouTube | 0.00236 | 0.00200 | 1.183 | 0.238 |

# Linear Regression_SnapChat_Mentalhealth

Model Fit Measures

| Model | R | R² | Adjusted R² | AIC | BIC | RMSE | Overall Model Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | F | df1 | df2 | p |
| 1 | 0.260 | 0.0675 | 0.0419 | 562 | 590 | 0.811 | 2.64 | 6 | 219 | 0.017 |

Omnibus ANOVA Test

| | Sum of Squares | df | Mean Square | F | p |
|---|---|---|---|---|---|
| Academic_1_Snapchat | 0.730 | 1 | 0.730 | 1.076 | 0.301 |
| Activity_1_SnapChat | 1.746 | 1 | 1.746 | 2.575 | 0.110 |
| Romance_1_SnapChat | 0.368 | 1 | 0.368 | 0.543 | 0.462 |
| Social_Connection_1_SnapChat | 1.484 | 1 | 1.484 | 2.188 | 0.141 |
| Social_Activity_1_SnapChat | 7.950 | 1 | 7.950 | 11.725 | <.001 |
| Relaxation_1_SnapChat | 0.476 | 1 | 0.476 | 0.702 | 0.403 |
| Residuals | 148.490 | 219 | 0.678 | | |

*Note.* Type 3 sum of squares

[4]

Model Coefficients - z_Full_Mental_Health_1

| Predictor | Estimate | SE | 95% Confidence Interval | | t | p | Stand. Estimate | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Lower | Upper | | | | Lower | Upper |
| Intercept | -0.03405 | 0.09529 | -0.22185 | 0.15375 | -0.357 | 0.721 | | | |
| Academic_1_Snapchat | -0.00196 | 0.00189 | -0.00570 | 0.00177 | -1.037 | 0.301 | -0.0694 | -0.2012 | 0.0624 |
| Activity_1_SnapChat | 0.01253 | 0.00781 | -0.00286 | 0.02791 | 1.605 | 0.110 | 0.1157 | -0.0264 | 0.2577 |
| Romance_1_SnapChat | 0.00239 | 0.00325 | -0.00400 | 0.00879 | 0.737 | 0.462 | 0.0521 | -0.0872 | 0.1915 |
| Social_Connection_1_SnapChat | 0.00358 | 0.00242 | -0.00119 | 0.00835 | 1.479 | 0.141 | 0.1124 | -0.0374 | 0.2622 |
| Social_Activity_1_SnapChat | -0.01012 | 0.00295 | -0.01594 | -0.00429 | -3.424 | <.001 | -0.2662 | -0.4194 | -0.1130 |
| Relaxation_1_SnapChat | 0.00153 | 0.00183 | -0.00207 | 0.00513 | 0.838 | 0.403 | 0.0646 | -0.0873 | 0.2165 |

## Assumption Checks

Collinearity Statistics

| | VIF | Tolerance |
|---|---|---|
| Academic_1_Snapchat | 1.05 | 0.952 |
| Activity_1_SnapChat | 1.22 | 0.820 |
| Romance_1_SnapChat | 1.17 | 0.852 |
| Social_Connection_1_SnapChat | 1.36 | 0.737 |
| Social_Activity_1_SnapChat | 1.42 | 0.705 |
| Relaxation_1_SnapChat | 1.40 | 0.717 |

[4]

Normality Test (Shapiro-Wilk)

| Statistic | p |
|---|---|
| 0.991 | 0.209 |

**Q-Q Plot**
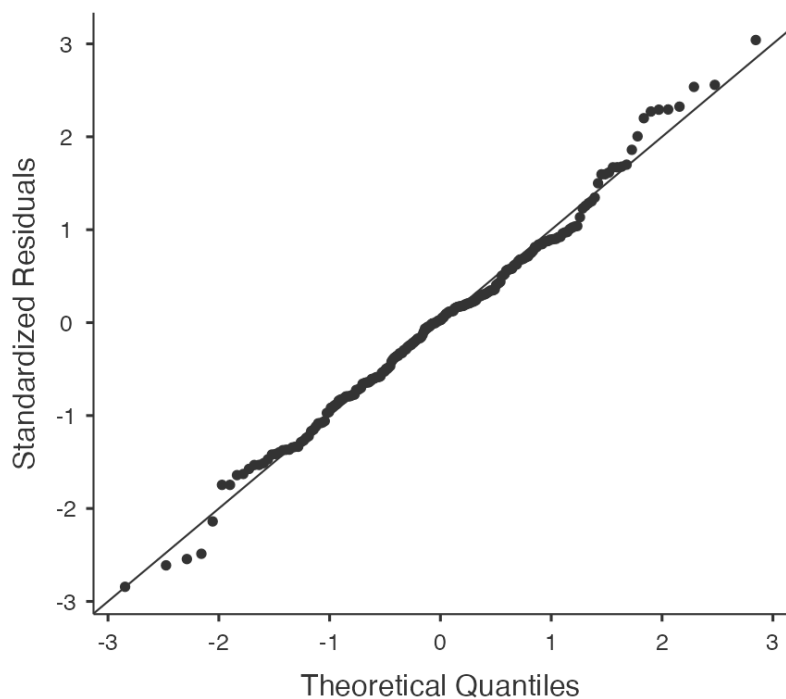
# Linear Regression_Snapchat_PhysicalHealth

Model Fit Measures

| | | | | | | | Overall Model Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Model | R | R² | Adjusted R² | AIC | BIC | RMSE | F | df1 | df2 | p |
| 1 | 0.223 | 0.0496 | 0.0236 | 645 | 672 | 0.973 | 1.90 | 6 | 219 | 0.081 |

Model Coefficients - z_Full_Physical_health

| | | | 95% Confidence Interval | | | | | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|---|---|
| Predictor | Estimate | SE | Lower | Upper | t | p | Stand. Estimate | Lower | Upper |
| Intercept | -0.09056 | 0.11435 | -0.31593 | 0.13480 | -0.792 | 0.429 | | | |
| Academic_1_Snapchat | -0.00167 | 0.00227 | -0.00615 | 0.00281 | -0.735 | 0.463 | -0.0496 | -0.18267 | 0.0834 |
| Activity_1_SnapChat | 0.01727 | 0.00937 | -0.00120 | 0.03573 | 1.843 | 0.067 | 0.1341 | -0.00929 | 0.2775 |
| Romance_1_SnapChat | 0.00332 | 0.00389 | -0.00436 | 0.01099 | 0.852 | 0.395 | 0.0608 | -0.07989 | 0.2015 |
| Social_Connection_1_SnapChat | 0.00358 | 0.00290 | -0.00214 | 0.00931 | 1.235 | 0.218 | 0.0947 | -0.05650 | 0.2460 |
| Social_Activity_1_SnapChat | -0.00873 | 0.00355 | -0.01572 | -0.00175 | -2.463 | 0.015 | -0.1933 | -0.34795 | -0.0386 |
| Relaxation_1_SnapChat | 0.00216 | 0.00219 | -0.00216 | 0.00648 | 0.986 | 0.325 | 0.0767 | -0.07665 | 0.2301 |

# Assumption Checks

Collinearity Statistics

| | VIF | Tolerance |
|---|---|---|
| Academic_1_Snapchat | 1.05 | 0.952 |
| Activity_1_SnapChat | 1.22 | 0.820 |
| Romance_1_SnapChat | 1.17 | 0.852 |
| Social_Connection_1_SnapChat | 1.36 | 0.737 |
| Social_Activity_1_SnapChat | 1.42 | 0.705 |
| Relaxation_1_SnapChat | 1.40 | 0.717 |

[4]

## Normality Test (Shapiro-Wilk)

| Statistic | p |
|-----------|-------|
| 0.994 | 0.446 |

## Q-Q Plot
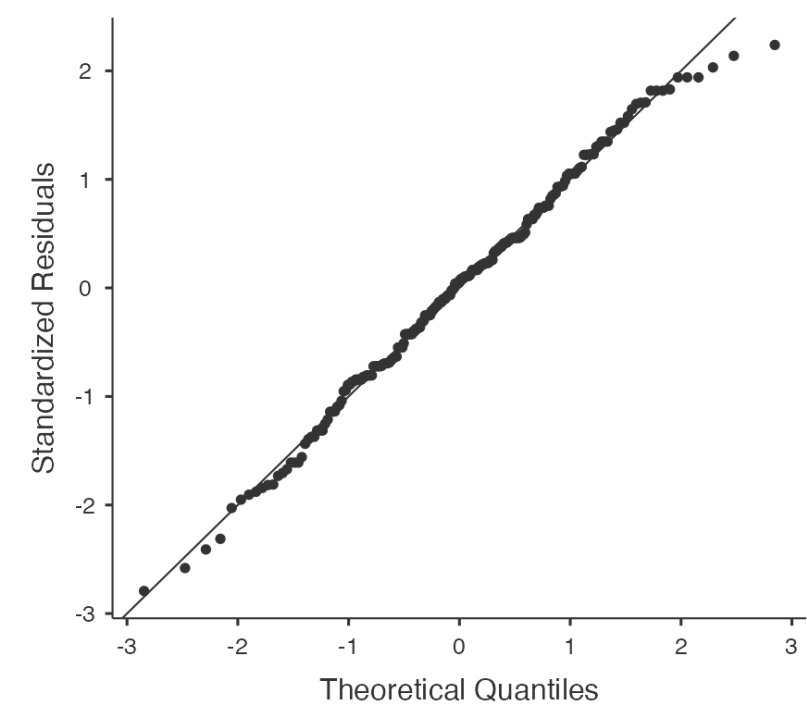


# Linear Regression_Snapchat_Fatigue

Model Fit Measures

| Model | R | R² |
|-------|-------|--------|
| 1 | 0.141 | 0.0199 |

Model Coefficients - z_fatigue_1

| Predictor | Estimate | SE | t | p |
|-----------|----------|---------|---------|-------|
| Intercept | -0.09354 | 0.11755 | -0.7958 | 0.427 |
| Academic_1_Snapchat | 0.00183 | 0.00231 | 0.7913 | 0.430 |
| Activity_1_SnapChat | -0.00652 | 0.00952 | -0.6849 | 0.494 |
| Romance_1_SnapChat | 0.00155 | 0.00396 | 0.3914 | 0.696 |
| Social_Connection_1_SnapChat | 0.00423 | 0.00297 | 1.4215 | 0.157 |
| Social_Activity_1_SnapChat | -0.00440 | 0.00360 | -1.2199 | 0.224 |
| Relaxation_1_SnapChat | -2.13e−4 | 0.00224 | -0.0953 | 0.924 |

# Linear Regression_snapchat_pain

Model Fit Measures

| Model | R | R² |
|-------|-------|--------|
| 1 | 0.213 | 0.0453 |

Model Coefficients - z_Pain_1

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | -0.24072 | 0.11471 | -2.099 | 0.037 |
| Academic_1_Snapchat | -0.00233 | 0.00228 | -1.020 | 0.309 |
| Activity_1_SnapChat | 0.00444 | 0.00940 | 0.472 | 0.637 |
| Romance_1_SnapChat | -8.71e-4 | 0.00418 | -0.209 | 0.835 |
| Social_Connection_1_SnapChat | 0.00689 | 0.00291 | 2.368 | 0.019 |
| Social_Activity_1_SnapChat | -0.00286 | 0.00362 | -0.791 | 0.430 |
| Relaxation_1_SnapChat | 0.00194 | 0.00221 | 0.877 | 0.382 |

# Linear Regression_Instagram_MentalHealth

Model Fit Measures

| Model | R | R² | Adjusted R² | AIC | BIC | RMSE | Overall Model Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | F | df1 | df2 | p |
| 1 | 0.293 | 0.0858 | 0.0607 | 558 | 585 | 0.803 | 3.42 | 6 | 219 | 0.003 |

Model Coefficients - z_Full_Mental_Health_1

| Predictor | Estimate | SE | 95% Confidence Interval | | t | p | Stand. Estimate | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Lower | Upper | | | | Lower | Upper |
| Intercept | 0.25276 | 0.10919 | 0.03757 | 0.46796 | 2.3149 | 0.022 | | | |
| Academic_1_Instagram | -0.00283 | 0.00340 | -0.00953 | 0.00388 | -0.8306 | 0.407 | -0.05412 | -0.18255 | 0.0743 |
| Activity_1_Instagram | 0.00387 | 0.00199 | -5.15e-5 | 0.00780 | 1.9450 | 0.053 | 0.14620 | -0.00194 | 0.2943 |
| Romance_1_Instagram | -0.00404 | 0.00490 | -0.01370 | 0.00562 | -0.8248 | 0.410 | -0.05481 | -0.18578 | 0.0762 |
| Social_Connection_1_Instagram | -1.69e-4 | 0.00215 | -0.00441 | 0.00407 | -0.0787 | 0.937 | -0.00580 | -0.15124 | 0.1396 |
| Social_Activity_1_Instagram | -0.00917 | 0.00239 | -0.01388 | -0.00445 | -3.8330 | <.001 | -0.30344 | -0.45947 | -0.1474 |
| Relaxation_1_Instagram | -5.37e-4 | 0.00149 | -0.00346 | 0.00239 | -0.3618 | 0.718 | -0.02597 | -0.16744 | 0.1155 |

# Assumption Checks

Collinearity Statistics

| | VIF | Tolerance |
|---|---|---|
| Academic_1_Instagram | 1.02 | 0.983 |
| Activity_1_Instagram | 1.35 | 0.739 |
| Romance_1_Instagram | 1.06 | 0.945 |
| Social_Connection_1_Instagram | 1.30 | 0.767 |
| Social_Activity_1_Instagram | 1.50 | 0.666 |
| Relaxation_1_Instagram | 1.23 | 0.810 |

[4]

Normality Test (Shapiro-Wilk)

| Statistic | p |
|---|---|
| 0.993 | 0.350 |

**Q-Q Plot**
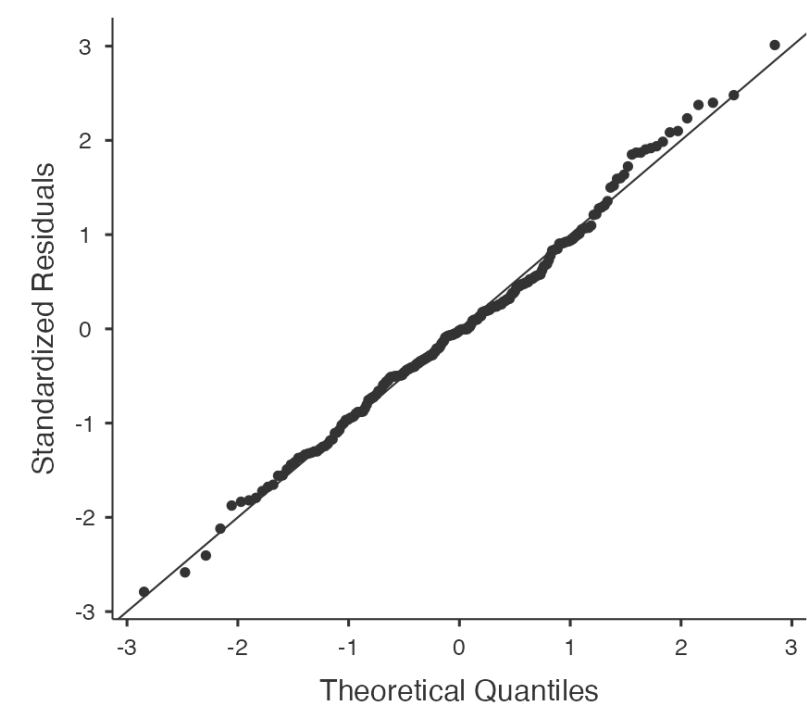


# Linear Regression_Instagram_PhysicalHealth

Model Fit Measures

| Model | R | R² |
|---|---|---|
| 1 | 0.172 | 0.0296 |

Model Coefficients - z_Full_Physical_health

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | 0.09854 | 0.13372 | 0.737 | 0.462 |
| Academic_1_Instagram | -0.00350 | 0.00417 | -0.839 | 0.402 |
| Activity_1_Instagram | 0.00290 | 0.00244 | 1.187 | 0.236 |
| Romance_1_Instagram | -0.00396 | 0.00600 | -0.660 | 0.510 |
| Social_Connection_1_Instagram | 0.00199 | 0.00263 | 0.757 | 0.450 |
| Social_Activity_1_Instagram | -0.00621 | 0.00293 | -2.122 | 0.035 |
| Relaxation_1_Instagram | -7.44e−4 | 0.00182 | -0.409 | 0.683 |

# Linear Regression_Instagram_Fatigue

Model Fit Measures

| Model | R | R² | Adjusted R² | AIC | BIC | RMSE | Overall Model Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | F | df1 | df2 | p |
| 1 | 0.277 | 0.0766 | 0.0510 | 633 | 660 | 0.959 | 3.00 | 6 | 217 | 0.008 |

Omnibus ANOVA Test

| | Sum of Squares | df | Mean Square | F | p |
|---|---|---|---|---|---|
| Academic_1_Instagram | 0.6135 | 1 | 0.6135 | 0.6465 | 0.422 |
| Activity_1_Instagram | 0.0165 | 1 | 0.0165 | 0.0174 | 0.895 |
| Romance_1_Instagram | 1.3496 | 1 | 1.3496 | 1.4222 | 0.234 |
| Social_Connection_1_Instagram | 10.0978 | 1 | 10.0978 | 10.6409 | 0.001 |
| Social_Activity_1_Instagram | 0.0721 | 1 | 0.0721 | 0.0760 | 0.783 |
| Relaxation_1_Instagram | 0.6119 | 1 | 0.6119 | 0.6448 | 0.423 |
| Residuals | 205.9241 | 217 | 0.9490 | | |

*Note.* Type 3 sum of squares

[4]

Model Coefficients - z_fatigue_1

| Predictor | Estimate | SE | 95% Confidence Interval Lower | 95% Confidence Interval Upper | t | p | Stand. Estimate | 95% Confidence Interval Lower | 95% Confidence Interval Upper |
|---|---|---|---|---|---|---|---|---|---|
| Intercept | 0.35043 | 0.13183 | 0.09061 | 0.61025 | 2.658 | 0.008 | | | |
| Academic_1_Instagram | -0.00327 | 0.00407 | -0.01128 | 0.00474 | -0.804 | 0.422 | -0.05290 | -0.1826 | 0.0768 |
| Activity_1_Instagram | -3.14e−4 | 0.00238 | -0.00501 | 0.00438 | -0.132 | 0.895 | -0.00999 | -0.1592 | 0.1392 |
| Romance_1_Instagram | -0.00698 | 0.00586 | -0.01852 | 0.00456 | -1.193 | 0.234 | -0.08002 | -0.2123 | 0.0522 |
| Social_Connection_1_Instagram | -0.00845 | 0.00259 | -0.01356 | -0.00335 | -3.262 | 0.001 | -0.24350 | -0.3906 | -0.0964 |
| Social_Activity_1_Instagram | -7.90e−4 | 0.00287 | -0.00644 | 0.00486 | -0.276 | 0.783 | -0.02195 | -0.1789 | 0.1350 |
| Relaxation_1_Instagram | 0.00143 | 0.00178 | -0.00208 | 0.00494 | 0.803 | 0.423 | 0.05806 | -0.0844 | 0.2005 |

# Assumption Checks

Collinearity Statistics

| | VIF | Tolerance |
|---|---|---|
| Academic_1_Instagram | 1.02 | 0.983 |
| Activity_1_Instagram | 1.35 | 0.743 |
| Romance_1_Instagram | 1.06 | 0.945 |
| Social_Connection_1_Instagram | 1.31 | 0.764 |
| Social_Activity_1_Instagram | 1.49 | 0.671 |
| Relaxation_1_Instagram | 1.23 | 0.814 |

[4]

Normality Test (Shapiro-Wilk)

| Statistic | p |
|---|---|
| 0.985 | 0.020 |

**Q-Q Plot**
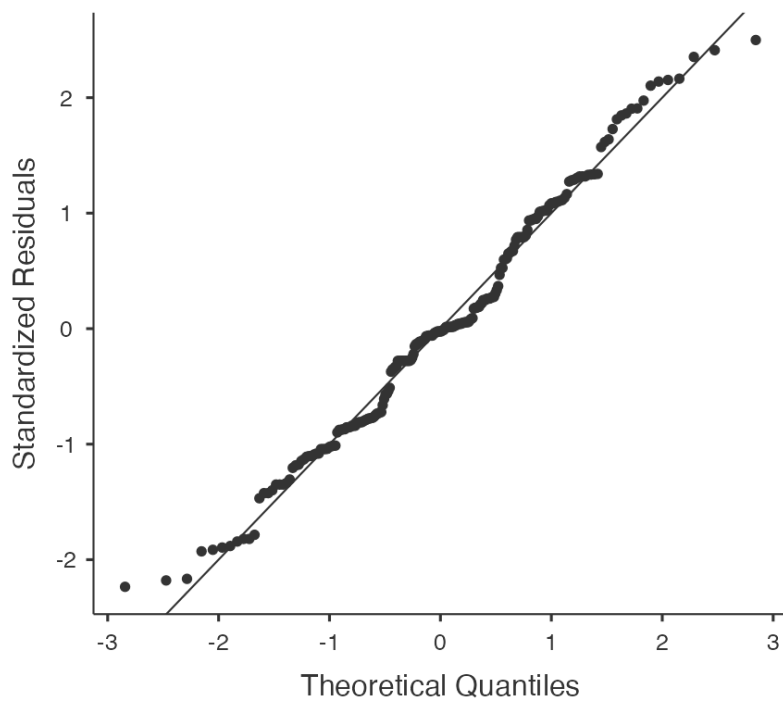
# Linear Regression_Instagram_Pain

Model Fit Measures

| Model | R | R² |
|-------|-------|--------|
| 1 | 0.120 | 0.0143 |

Model Coefficients - z_Pain_1

| Predictor | Estimate | SE | t | p |
|-----------|----------|------|------|------|
| Intercept | 0.12982 | 0.13493 | 0.9621 | 0.337 |
| Academic_1_Instagram | -3.73e−4 | 0.00420 | -0.0888 | 0.929 |
| Activity_1_Instagram | 0.00188 | 0.00247 | 0.7610 | 0.447 |
| Romance_1_Instagram | 0.00221 | 0.00605 | 0.3646 | 0.716 |
| Social_Connection_1_Instagram | 2.80e-4 | 0.00267 | 0.1052 | 0.916 |
| Social_Activity_1_Instagram | -0.00245 | 0.00296 | -0.8283 | 0.408 |
| Relaxation_1_Instagram | -0.00230 | 0.00184 | -1.2443 | 0.215 |

# Linear Regression_Groupme_Mental

Model Fit Measures

| Model | R | R² |
|-------|-------|--------|
| 1 | 0.114 | 0.0131 |

Model Coefficients - z_Full_Mental_Health_1

| Predictor | Estimate | SE | t | p |
|-----------|----------|------|------|------|
| Intercept | 0.06690 | 0.06999 | 0.9559 | 0.340 |
| Academic_1_GroupMe | -0.00190 | 0.00130 | -1.4641 | 0.145 |
| Social_Connection_1_GroupMe | -7.93e−5 | 0.00417 | -0.0190 | 0.985 |
| Social_Activity_1_GroupMe | -0.00235 | 0.00842 | -0.2791 | 0.780 |

# Linear Regression_groupme_Physical

Model Fit Measures

| Model | R | R² |
|---|---|---|
| 1 | 0.138 | 0.0190 |

Model Coefficients - z_Full_Physical_health

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | 0.08029 | 0.08294 | 0.968 | 0.334 |
| Academic_1_GroupMe | -0.00252 | 0.00154 | -1.636 | 0.103 |
| Social_Connection_1_GroupMe | 0.00216 | 0.00494 | 0.437 | 0.663 |
| Social_Activity_1_GroupMe | -0.00926 | 0.00998 | -0.927 | 0.355 |

# Linear Regression_groupme_fatigue

Model Fit Measures

| Model | R | R² |
|---|---|---|
| 1 | 0.124 | 0.0154 |

Model Coefficients - z_fatigue_1

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | 0.05834 | 0.08368 | 0.697 | 0.486 |
| Academic_1_GroupMe | -0.00161 | 0.00154 | -1.041 | 0.299 |
| Social_Connection_1_GroupMe | 0.00202 | 0.00496 | 0.407 | 0.684 |
| Social_Activity_1_GroupMe | -0.01289 | 0.01000 | -1.289 | 0.199 |

# Linear Regression_groupme_pain

Model Fit Measures

| Model | R | R² |
|---|---|---|
| 1 | 0.0581 | 0.00338 |

Model Coefficients - z_Pain_1

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | -0.01690 | 0.08419 | -0.2008 | 0.841 |
| Academic_1_GroupMe | -4.73e−4 | 0.00155 | -0.3043 | 0.761 |
| Social_Connection_1_GroupMe | 0.00382 | 0.00499 | 0.7666 | 0.444 |
| Social_Activity_1_GroupMe | 3.89e-4 | 0.01006 | 0.0387 | 0.969 |

# Linear Regression_Total_MentalHealth

Model Fit Measures

| Model | R | R² |
|---|---|---|
| 1 | 0.293 | 0.0858 |

Model Coefficients - z_Full_Mental_Health_1

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | 0.12817 | 0.12671 | 1.0115 | 0.313 |
| Total_Activity_1 | 0.00627 | 0.00406 | 1.5434 | 0.124 |
| Total_Romance_1 | 3.05e-4 | 0.00454 | 0.0671 | 0.947 |
| Total_Social_Connection_1 | 0.00928 | 0.00544 | 1.7082 | 0.089 |
| Total_Social_Activity_1 | -0.02255 | 0.00555 | -4.0597 | <.001 |
| Total_Relaxation_1 | -0.00168 | 0.00262 | -0.6410 | 0.522 |

## Linear Regression_Total_PhysicalHealth

Model Fit Measures

| Model | R | R² |
|---|---|---|
| 1 | 0.186 | 0.0347 |

Model Coefficients - z_Full_Physical_health

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | 0.0572 | 0.15477 | 0.3696 | 0.712 |
| Total_Activity_1 | -1.10e−4 | 0.00496 | -0.0221 | 0.982 |
| Total_Romance_1 | 9.74e-4 | 0.00555 | 0.1755 | 0.861 |
| Total_Social_Connection_1 | 0.0107 | 0.00664 | 1.6056 | 0.110 |
| Total_Social_Activity_1 | -0.0150 | 0.00678 | -2.2074 | 0.028 |
| Total_Relaxation_1 | -9.90e−4 | 0.00320 | -0.3097 | 0.757 |

## Linear Regression_Total_Fatigue

Model Fit Measures

| Model | R | R² |
|---|---|---|
| 1 | 0.150 | 0.0226 |

Model Coefficients - z_fatigue_1

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | 0.22854 | 0.15742 | 1.452 | 0.148 |
| Total_Activity_1 | -0.00172 | 0.00499 | -0.344 | 0.731 |
| Total_Romance_1 | 0.00155 | 0.00559 | 0.277 | 0.782 |
| Total_Social_Connection_1 | -0.00700 | 0.00668 | -1.047 | 0.296 |
| Total_Social_Activity_1 | -0.00663 | 0.00684 | -0.969 | 0.333 |
| Total_Relaxation_1 | 6.22e-4 | 0.00323 | 0.192 | 0.848 |

## Linear Regression_Total_pain

Model Fit Measures

| Model | R | R² |
|---|---|---|
| 1 | 0.0980 | 0.00960 |

Model Coefficients - z_Pain_1

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | -0.08201 | 0.15719 | -0.522 | 0.602 |
| Total_Activity_1 | 0.00178 | 0.00504 | 0.352 | 0.725 |
| Total_Romance_1 | 0.00108 | 0.00581 | 0.186 | 0.853 |
| Total_Social_Connection_1 | 0.00744 | 0.00674 | 1.104 | 0.271 |
| Total_Social_Activity_1 | -0.00772 | 0.00691 | -1.118 | 0.265 |
| Total_Relaxation_1 | 4.16e-4 | 0.00325 | 0.128 | 0.898 |

# Linear Regression_SocialActivity_total-platforms

Model Fit Measures

| Model | R | R² | Adjusted R² | AIC | BIC | RMSE | Overall Model Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | F | df1 | df2 | p |
| 1 | 0.262 | 0.0686 | 0.0475 | 560 | 584 | 0.810 | 3.24 | 5 | 220 | 0.008 |

Model Coefficients - z_Full_Mental_Health_1

| Predictor | Estimate | SE | 95% Confidence Interval | | t | p | Stand. Estimate | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Lower | Upper | | | | Lower | Upper |
| Intercept | 0.26788 | 0.08685 | 0.09671 | 0.43905 | 3.08428 | 0.002 | | | |
| Social_Activity_1_Instagram | -0.00606 | 0.00270 | -0.01138 | -7.53e-4 | -2.25024 | 0.025 | -0.2007 | -0.377 | -0.0249 |
| Social_Activity_1_YouTube | -0.00335 | 0.00432 | -0.01187 | 0.00518 | -0.77403 | 0.440 | -0.0542 | -0.192 | 0.0838 |
| Social_Activity_1_SnapChat | -1.66e-5 | 0.00323 | -0.00639 | 0.00636 | -0.00512 | 0.996 | -4.36e-4 | -0.168 | 0.1672 |
| Social_Activity_1_TikTok | -0.00228 | 0.00349 | -0.00917 | 0.00461 | -0.65241 | 0.515 | -0.0541 | -0.217 | 0.1092 |
| Social_Activity_1_GroupMe | -0.00161 | 0.00742 | -0.01623 | 0.01300 | -0.21757 | 0.828 | -0.0146 | -0.146 | 0.1173 |

## Assumption Checks

Collinearity Statistics

| | VIF | Tolerance |
|---|---|---|
| Social_Activity_1_Instagram | 1.88 | 0.532 |
| Social_Activity_1_YouTube | 1.16 | 0.864 |
| Social_Activity_1_SnapChat | 1.71 | 0.585 |
| Social_Activity_1_TikTok | 1.62 | 0.617 |
| Social_Activity_1_GroupMe | 1.06 | 0.946 |

[4]

| Statistic | p |
|-----------|-------|
| 0.992 | 0.257 |

**Q-Q Plot**
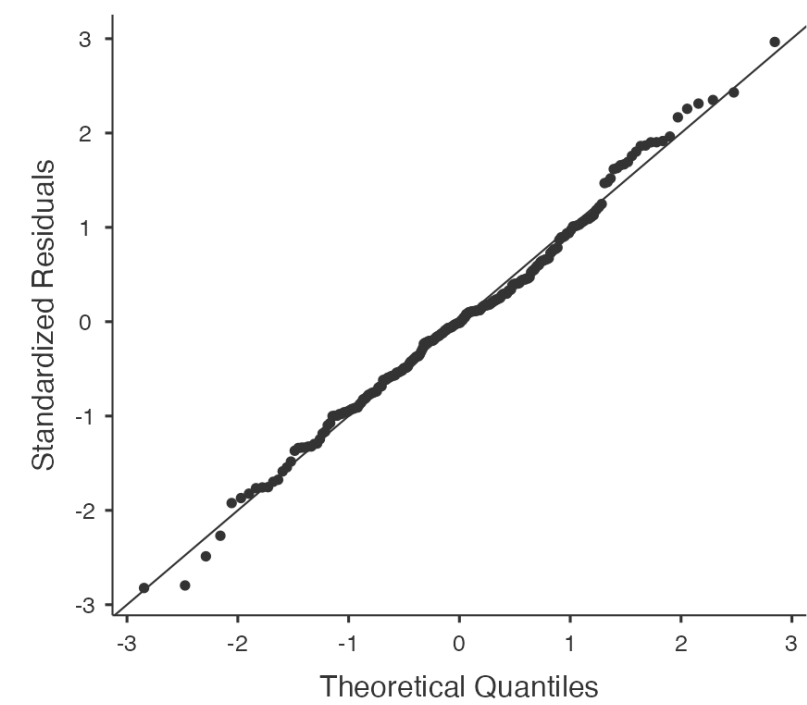


# Linear Regression_SocialActivity_total-platforms_physicalhealth

Model Fit Measures

| Model | R | R² | Adjusted R² | AIC | BIC | RMSE | Overall Model Test | | | |
|-------|------|--------|-------------|-----|-----|-------|------|-----|-----|-------|
| | | | | | | | F | df1 | df2 | p |
| 1 | 0.172 | 0.0297 | 0.00762 | 648 | 671 | 0.983 | 1.35 | 5 | 220 | 0.246 |

Omnibus ANOVA Test

| | Sum of Squares | df | Mean Square | F | p |
|---|---------------|-----|-------------|-------|-------|
| Social_Activity_1_YouTube | 0.672 | 1 | 0.672 | 0.677 | 0.412 |
| Social_Activity_1_SnapChat | 0.155 | 1 | 0.155 | 0.157 | 0.693 |
| Social_Activity_1_Instagram | 0.422 | 1 | 0.422 | 0.425 | 0.515 |
| Social_Activity_1_TikTok | 1.355 | 1 | 1.355 | 1.366 | 0.244 |
| Social_Activity_1_GroupMe | 1.167 | 1 | 1.167 | 1.176 | 0.279 |
| Residuals | 218.323 | 220 | 0.992 | | |

*Note.* Type 3 sum of squares

[4]

Model Coefficients - z_Full_Physical_health

| Predictor | Estimate | SE | 95% Confidence Interval | | t | p | Stand. Estimate | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Lower | Upper | | | | Lower | Upper |
| Intercept | 0.17349 | 0.10538 | -0.03419 | 0.38117 | 1.646 | 0.101 | | | |
| Social_Activity_1_YouTube | -0.00432 | 0.00525 | -0.01466 | 0.00602 | -0.823 | 0.412 | -0.0588 | -0.200 | 0.0820 |
| Social_Activity_1_SnapChat | 0.00155 | 0.00392 | -0.00618 | 0.00928 | 0.396 | 0.693 | 0.0344 | -0.137 | 0.2055 |
| Social_Activity_1_Instagram | -0.00213 | 0.00327 | -0.00858 | 0.00431 | -0.652 | 0.515 | -0.0594 | -0.239 | 0.1201 |
| Social_Activity_1_TikTok | -0.00495 | 0.00424 | -0.01331 | 0.00340 | -1.169 | 0.244 | -0.0988 | -0.265 | 0.0678 |
| Social_Activity_1_GroupMe | -0.00976 | 0.00900 | -0.02749 | 0.00798 | -1.084 | 0.279 | -0.0741 | -0.209 | 0.0605 |

## Assumption Checks

Collinearity Statistics

| | VIF | Tolerance |
|---|---|---|
| Social_Activity_1_YouTube | 1.16 | 0.864 |
| Social_Activity_1_SnapChat | 1.71 | 0.585 |
| Social_Activity_1_Instagram | 1.88 | 0.532 |
| Social_Activity_1_TikTok | 1.62 | 0.617 |
| Social_Activity_1_GroupMe | 1.06 | 0.946 |

[4]

Normality Test (Shapiro-Wilk)

| Statistic | p |
|---|---|
| 0.987 | 0.036 |

**Q-Q Plot**



## Linear Regression_SocialConnection_Total_Mental
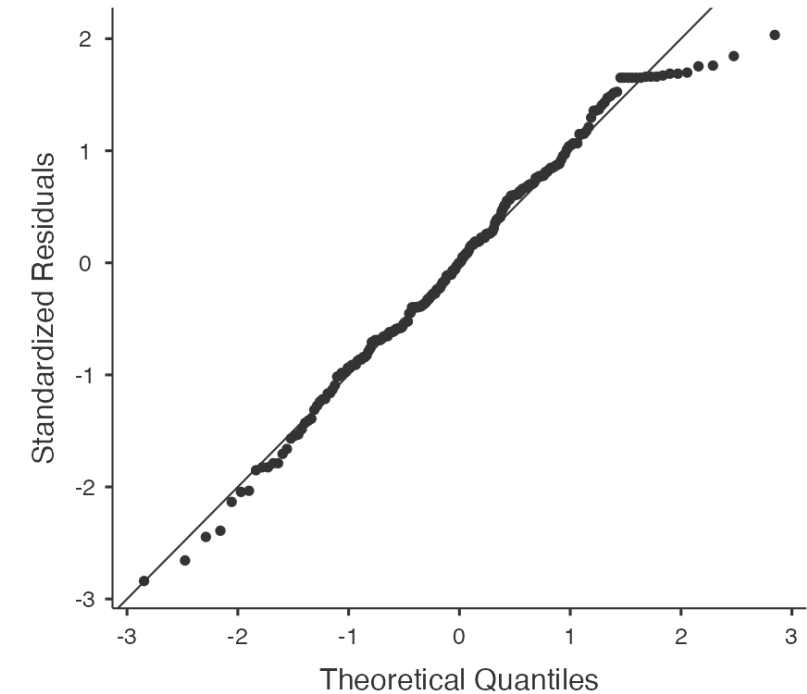
Model Fit Measures

| | | | | | | | Overall Model Test | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Model | R | R² | Adjusted R² | AIC | BIC | RMSE | F | df1 | df2 | p |
| 1 | 0.226 | 0.0510 | 0.0295 | 564 | 588 | 0.818 | 2.37 | 5 | 220 | 0.041 |

Omnibus ANOVA Test

| | Sum of Squares | df | Mean Square | F | p |
|---|---|---|---|---|---|
| Social_Connection_1_YouTube | 3.2756 | 1 | 3.2756 | 4.769 | 0.030 |
| Social_Connection_1_SnapChat | 3.1836 | 1 | 3.1836 | 4.635 | 0.032 |
| Social_Connection_1_TikTok | 0.0817 | 1 | 0.0817 | 0.119 | 0.731 |
| Social_Connection_1_Instagram | 3.4541 | 1 | 3.4541 | 5.029 | 0.026 |
| Social_Connection_1_GroupMe | 0.2953 | 1 | 0.2953 | 0.430 | 0.513 |
| Residuals | 151.1063 | 220 | 0.6868 | | |

*Note.* Type 3 sum of squares

[4]

Model Coefficients - z_Full_Mental_Health_1

| | | | 95% Confidence Interval | | | | | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|---|---|
| Predictor | Estimate | SE | Lower | Upper | t | p | Stand. Estimate | Lower | Upper |
| Intercept | 0.02990 | 0.10875 | -0.18442 | 0.24422 | 0.275 | 0.784 | | | |
| Social_Connection_1_YouTube | 0.01308 | 0.00599 | 0.00128 | 0.02488 | 2.184 | 0.030 | 0.1439 | 0.0140 | 0.2739 |
| Social_Connection_1_SnapChat | 0.00518 | 0.00240 | 4.38e-4 | 0.00992 | 2.153 | 0.032 | 0.1626 | 0.0138 | 0.3115 |
| Social_Connection_1_TikTok | -0.00121 | 0.00352 | -0.00815 | 0.00572 | -0.345 | 0.731 | -0.0235 | -0.1576 | 0.1107 |
| Social_Connection_1_Instagram | -0.00490 | 0.00219 | -0.00921 | -5.94e-4 | -2.243 | 0.026 | -0.1683 | -0.3162 | -0.0204 |
| Social_Connection_1_GroupMe | -0.00231 | 0.00352 | -0.00924 | 0.00462 | -0.656 | 0.513 | -0.0440 | -0.1761 | 0.0882 |

# Linear Regression_socialconnection_total_physical

Model Fit Measures

| Model | R | R² |
|---|---|---|
| 1 | 0.148 | 0.0219 |

Model Coefficients - z_Full_Physical_health

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | -0.07213 | 0.13124 | -0.550 | 0.583 |
| Social_Connection_1_YouTube | 0.00733 | 0.00723 | 1.014 | 0.311 |
| Social_Connection_1_SnapChat | 0.00531 | 0.00290 | 1.829 | 0.069 |
| Social_Connection_1_TikTok | -0.00329 | 0.00425 | -0.774 | 0.440 |
| Social_Connection_1_Instagram | -0.00188 | 0.00264 | -0.710 | 0.478 |
| Social_Connection_1_GroupMe | -0.00305 | 0.00424 | -0.718 | 0.474 |

# Linear Regression_socialactivity_Pain_Totalplatforms

Model Fit Measures

| Model | R | R² |
|---|---|---|
| 1 | 0.120 | 0.0143 |

Model Coefficients - z_Pain_1

| Predictor | Estimate | SE | t | p |
|---|---|---|---|---|
| Intercept | 0.09275 | 0.10641 | 0.8717 | 0.384 |
| Social_Activity_1_YouTube | -0.00437 | 0.00531 | -0.8240 | 0.411 |
| Social_Activity_1_SnapChat | 0.00443 | 0.00398 | 1.1127 | 0.267 |
| Social_Activity_1_Instagram | -0.00363 | 0.00330 | -1.1009 | 0.272 |
| Social_Activity_1_TikTok | -2.83e-4 | 0.00428 | -0.0661 | 0.947 |
| Social_Activity_1_GroupMe | 0.00414 | 0.00908 | 0.4565 | 0.648 |

# References

[1] The jamovi project (2022). *jamovi*. (Version 2.3) [Computer Software]. Retrieved from https://www.jamovi.org.

[2] R Core Team (2021). *R: A Language and environment for statistical computing*. (Version 4.1) [Computer software]. Retrieved from https://cran.r-project.org. (R packages retrieved from MRAN snapshot 2022-01-01).

[3] Revelle, W. (2019). *psych: Procedures for Psychological, Psychometric, and Personality Research*. [R package]. Retrieved from https://cran.r-project.org/package=psych.

[4] Fox, J., & Weisberg, S. (2020). *car: Companion to Applied Regression*. [R package]. Retrieved from https://cran.r-project.org/package=car.