# Supplementary Materials and Tables

**Table S1.** Descriptive Statistics and Correlations between Parcels.

| Variable | *M* | *SD* | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ARM1 | .36 | .27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARM2 | .51 | .34 | .40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARM3 | .33 | .21 | .27 | .30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ERA1 | .50 | .14 | .18 | .29 | .12 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ERA2 | .56 | .21 | .14 | .17 | .11 | .31 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ERA3 | .72 | .18 | .11 | .19 | .09 | .31 | .26 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ERA4 | .45 | .25 | .15 | .13 | .10 | .21 | .14 | .19 | | | | | | | | | | | | | | | | | | | | | | | | |
| EU1 | .64 | .18 | .10 | .15 | .04 | .12 | .13 | .09 | .11 | | | | | | | | | | | | | | | | | | | | | | | |
| EU2 | .62 | .19 | .13 | .15 | .10 | .17 | .13 | .13 | .09 | .23 | | | | | | | | | | | | | | | | | | | | | | |
| EU3 | .69 | .25 | .10 | .14 | .11 | .17 | .09 | .14 | .12 | .21 | .14 | | | | | | | | | | | | | | | | | | | | | |
| EU4 | .70 | .23 | .19 | .22 | .13 | .22 | .20 | .16 | .16 | .22 | .25 | .22 | | | | | | | | | | | | | | | | | | | | |
| ER1 | .51 | .12 | −.08 | −.03 | .01 | −.02 | −.00 | −.00 | .01 | .02 | −.04 | .02 | −.04 | | | | | | | | | | | | | | | | | | | |
| ER2 | .56 | .13 | −.06 | −.03 | −.08 | −.00 | −.02 | .01 | −.04 | −.03 | −.05 | −.02 | −.00 | .37 | | | | | | | | | | | | | | | | | | |
| ER3 | .59 | .15 | −.01 | .06 | −.00 | .03 | .03 | .02 | −.02 | .03 | −.01 | −.01 | .06 | .51 | .49 | | | | | | | | | | | | | | | | | |
| EM1 | .55 | .27 | .11 | .20 | .13 | .20 | .23 | .15 | .16 | .21 | .22 | .15 | .27 | .08 | .07 | .16 | | | | | | | | | | | | | | | | |
| EM2 | .41 | .23 | .14 | .16 | .11 | .13 | .13 | .12 | .09 | .11 | .12 | .07 | .17 | .09 | .07 | .14 | .34 | | | | | | | | | | | | | | | |
| EM3 | .36 | .22 | .14 | .08 | .06 | .12 | .17 | .10 | .12 | .14 | .09 | .13 | .13 | .08 | .01 | .07 | .25 | .21 | | | | | | | | | | | | | | |
| EM4 | .42 | .24 | .13 | .20 | .08 | .19 | .18 | .15 | .16 | .14 | .13 | .15 | .19 | .05 | .07 | .10 | .38 | .29 | .25 | | | | | | | | | | | | | |
| PF1 | 5.15 | 1.02 | −.13 | −.05 | −.05 | −.04 | −.06 | −.06 | −.10 | −.00 | .02 | −.03 | −.08 | .17 | .18 | .17 | .02 | .01 | −.08 | .05 | | | | | | | | | | | | |
| PF2 | 5.05 | 1.02 | −.17 | −.09 | −.10 | −.04 | −.08 | −.08 | −.10 | −.01 | −.02 | −.02 | −.06 | .17 | .15 | .13 | −.01 | −.03 | −.06 | .03 | .78 | | | | | | | | | | | |
| PF3 | 4.72 | 1.03 | −.16 | −.02 | −.09 | −.04 | −.03 | −.08 | −.04 | .01 | −.02 | −.03 | −.05 | .16 | .15 | .12 | −.00 | −.07 | −.13 | .03 | .66 | .71 | | | | | | | | | | |
| NF1 | 3.29 | 1.25 | .13 | .13 | .07 | .12 | .06 | .06 | .14 | −.01 | .04 | .06 | .08 | −.20 | −.17 | −.20 | .01 | −.02 | .09 | .03 | −.53 | −.52 | −.39 | | | | | | | | | |
| NF2 | 3.48 | 1.21 | .11 | .03 | .04 | .06 | .07 | .02 | .13 | −.03 | .04 | .07 | .08 | −.16 | −.18 | −.18 | −.02 | −.03 | .07 | .01 | −.47 | −.48 | −.36 | .74 | | | | | | | | |
| NF3 | 3.40 | 1.21 | .00 | −.02 | −.01 | .02 | .07 | −.01 | .03 | −.03 | .00 | −.01 | −.00 | −.11 | −.18 | −.17 | −.10 | −.02 | .03 | −.06 | −.38 | −.38 | −.26 | .59 | .64 | | | | | | |
| THR1 | 5.25 | 1.16 | −.13 | −.11 | −.05 | −.10 | −.10 | −.06 | −.14 | −.00 | −.04 | −.02 | −.11 | .21 | .21 | .18 | −.04 | −.00 | −.04 | −.05 | .58 | .56 | .48 | −.51 | −.51 | −.34 | | | | | |
| THR2 | 5.54 | 1.05 | −.10 | −.09 | −.06 | −.07 | −.06 | −.04 | −.12 | −.02 | −.02 | −.03 | −.10 | .20 | .22 | .20 | −.04 | .02 | −.02 | −.02 | .53 | .51 | .44 | −.44 | −.48 | −.32 | .81 | | | | | |
| THR3 | 5.92 | 0.90 | −.11 | −.06 | −.07 | −.02 | −.00 | −.02 | −.11 | .02 | −.02 | −.02 | −.05 | .21 | .20 | .16 | .02 | .04 | −.00 | .00 | .52 | .49 | .40 | −.43 | −.45 | −.31 | .80 | .77 | | | | |
| AFE1 | 5.78 | 0.92 | −.06 | −.04 | −.01 | −.05 | −.04 | −.04 | −.07 | .01 | .04 | −.01 | .01 | .10 | .11 | .15 | .05 | .03 | −.03 | .01 | .51 | .45 | .37 | −.34 | −.31 | −.24 | .45 | .47 | .43 | | | |
| AFE2 | 4.90 | 1.09 | .01 | .00 | .00 | .01 | −.02 | −.02 | −.05 | −.01 | .05 | .02 | .06 | .10 | .12 | .19 | .12 | .05 | −.01 | .02 | .42 | .37 | .32 | −.31 | −.30 | −.30 | .37 | .41 | .34 | .71 | | |
| AFE3 | 5.40 | 1.23 | −.05 | −.06 | −.06 | −.02 | −.04 | −.04 | −.06 | .04 | .04 | .00 | −.01 | .09 | .06 | .13 | .05 | −.01 | −.00 | −.03 | .48 | .47 | .39 | −.35 | −.32 | −.25 | .42 | .40 | .36 | .77 | .65 | |
| GPA | 3.22 | 0.51 | .07 | .09 | .08 | .14 | .13 | .14 | .09 | .06 | .10 | .16 | .11 | −.04 | −.03 | −.05 | .12 | −.01 | .10 | .09 | .10 | .12 | .09 | −.07 | −.12 | −.08 | .16 | .15 | .17 | .11 | .07 | .08 |

**Table S2.** SEM Coefficients Regressing GECo Branches on APM and the Big Five.

| Factor | Standardized Beta Weights | | | |
|---|---|---|---|---|
| | **ERA** | **EU** | **ER** | **EM** |
| GF | .52** | .47* | .03 | .41** |
| O | .10 | .03 | .06 | .02 |
| C | −.14* | −.10 | .10* | −.03 |
| E | −.04 | −.15 | .09 | −.13* |
| A | .14* | .24** | .04 | .26** |
| N | .08 | −.05 | −.36* | −.13* |
| *R* | .61 | .56 | .45 | .50 |
| $R^2$ | .37 | .32 | .21 | .25 |

*Note*. GF = Fluid intelligence; O = Openness to Experience; C = Conscientiousness; E = Extraversion; A = Agreeableness; N = Neuroticism; ERA = Emotion recognition ability; EU = Emotion understanding; ER = Emotion regulation; EM = Emotion management.
* indicates $p < .05$. ** indicates $p < .01$.

**Table S3.** Commonality Analyses on EI Scales and GPA.

| Predictor Subset | Coefficient | % Total |
|---|---|---|
| RMscore | 0.001 | 0.017 |
| EM_score | 0.001 | 0.017 |
| ERA_score | 0.014 | 0.285 |
| EU_score | 0.007 | 0.138 |
| EReg_score | 0.003 | 0.059 |
| RMscore,EM_score | 0 | 0.005 |
| RMscore,ERA_score | 0.002 | 0.046 |
| EM_score,ERA_score | 0.002 | 0.046 |
| RMscore,EU_score | 0.001 | 0.02 |
| EM_score,EU_score | 0.002 | 0.035 |
| ERA_score,EU_score | 0.005 | 0.103 |
| RMscore,EReg_score | 0 | 0.004 |
| EM_score,EReg_score | 0 | −0.009 |
| ERA_score,EReg_score | 0 | 0.006 |
| EU_score,EReg_score | 0 | 0.01 |
| RMscore,EM_score,ERA_score | 0.001 | 0.024 |
| RMscore,EM_score,EU_score | 0.001 | 0.014 |
| RMscore,ERA_score,EU_score | 0.002 | 0.05 |
| EM_score,ERA_score,EU_score | 0.004 | 0.077 |
| RMscore,EM_score,EReg_score | 0 | −0.002 |
| RMscore,ERA_score,EReg_score | 0 | 0.004 |
| EM_score,ERA_score,EReg_score | −0.001 | −0.01 |
| RMscore,EU_score,EReg_score | 0 | 0.003 |
| EM_score,EU_score,EReg_score | 0 | −0.008 |
| ERA_score,EU_score,EReg_score | 0 | 0.005 |
| RMscore,EM_score,ERA_score,EU_score | 0.004 | 0.071 |
| RMscore,EM_score,ERA_score,EReg_score | 0 | −0.003 |
| RMscore,EM_score,EU_score,EReg_score | 0 | −0.002 |
| RMscore,ERA_score,EU_score,EReg_score | 0 | 0.005 |
| EM_score,ERA_score,EU_score,EReg_score | 0 | −0.006 |
| RMscore,EM_score,ERA_score,EU_score,EReg_score | 0 | −0.004 |

To check for possible suppression we ran a commonality analysis with GPA as outcome and fluid intelligence along with EI branches as predictors. Commonality analysis performs all possible subsets regression for a set of predictors to break down effects into unique and common variance across all possible sets. Negative commonality coefficients large in magnitude indicate predictors which are affecting each other in opposing directions or that one variable confound the predictive power of another. This is suggestive of suppression but not definitive because negative coefficients can arise when predictors have opposing correlations.

Above is a table of the results which show mostly positive to small or nill common effects. All pairings with ER show some signs of small negative commonalities but their coefficients are often zero indicating ER does not help other predictors gain greater weight in a regression equation. Further, to the extent ER suppresses variance it would only account for less then .01% of the overall R-squared for GPA (sum of % total of negative effects * by overall R-squared).

We also ran a multiple regression to identify if the signs of any predictor beta weights switched or strengthened compared to their bivariate counterparts and found no such exaggerations. Hence, it appears ER just seem to have little to no relationship with GPA in the current findings and does not appear to increase the predictive power of the other predictor's unique effects.