**Final Exam APA Results Section**

I am interested in researching the extent to which the personality traits agreeableness and conscientiousness predict job performance in hospitality and tourism jobs. Prior to conducting my study, I ran a power analysis in order to determine the sample size needed to obtain a power of .85. I expected that together agreeableness and conscientiousness would predict .20% of the variance in performance scores. In addition, I expected that agreeableness would uniquely predict .10% of the variance when in a regression with conscientiousness. I conducted a power analysis for assessing incremental prediction in multiple regression. The results indicated that I would need an N = 74 to obtain a power of .85.

Ultimately, I decided to include N = 2800 participants in my study and conducted a multiple regression to explore the extent to which the personality traits agreeableness and conscientiousness predict job performance. The zero order correlations are included indicating the overall correlations among agreeableness, conscientiousness, performance, and age (see Table 1).

Using multiple regression, I sought to determine the extent to which agreeableness predicts job performance above and beyond conscientiousness for the overall data set, as well as by gender. For the overall data set, conscientiousness accounts for .07% of the variance in Job Performance, R2 =.07,95% CI [.05,.09], *p* <.01. When Agreeableness is added, it accounts for an additional .17% of the variance Sr2=.17, 95% CI [.14, .19]. With both Conscientiousness and Agreeableness, the multiple regression model was R² = .24, 95% CI [.21,.26] p < .001 (see Table 2). Therefore, Agreeableness does contribute to Job Performance above and beyond Conscientiousness for the overall sample.

For males only, conscientiousness accounts for .09% of the variance in Job Performance on it’s own, R2 =.09, 95% CI [.05,.12], *p* <.001. When Agreeableness is added, it accounts for an additional .18% of the variance Sr2 =.18, 95% CI[.14, .23]. With both Conscientiousness and Agreeableness the multiple regression model was R² = .27, 95% CI [.[.22,.31] p < .001 (see Table 3). Therefore, Agreeableness does contribute to Job Performance above and beyond Conscientiousness for the males.

For females only, conscientiousness accounts for .06% of the variance in Job Performance on it’s own, R2 =.06, 95% CI [.04,.08], *p* <.001. When Agreeableness is added, it accounts for an additional .15% of the variance Sr2 =.15, 95% CI[.12, .18]. With both Conscientiousness and Agreeableness the multiple regression model was R² = .20, 95% CI [.17,.23] p < .001 (see Table 4). Therefore, Agreeableness does contribute to Job Performance above and beyond Conscientiousness for females.

Table 1

*Means, standard deviations, and correlations with confidence intervals*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | *M* | *SD* | 1 | 2 | 3 |
|  |  |  |  |  |  |
| 1. age | 48.78 | 11.13 |  |  |  |
|  |  |  |  |  |  |
| 2. agreeableness | 4.65 | 0.90 | .19\*\* |  |  |
|  |  |  | [.15, .22] |  |  |
|  |  |  |  |  |  |
| 3. conscientiousness | 4.27 | 0.95 | .12\*\* | .26\*\* |  |
|  |  |  | [.08, .15] | [.22, .29] |  |
|  |  |  |  |  |  |
| 4. performance | 4.15 | 1.06 | .06\*\* | .46\*\* | .26\*\* |
|  |  |  | [.03, .10] | [.43, .49] | [.23, .30] |
|  |  |  |  |  |  |

*Note.* \* indicates *p* < .05; \*\* indicates *p* < .01. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014).

Table 2

*Regression results using performance as the criterion*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Predictor | *b* | *b*  95% CI  [LL, UL] | *beta* | *beta*  95% CI  [LL, UL] | *sr2* | *sr2*  95% CI  [LL, UL] | *r* | Fit |
| (Intercept) | 1.10\*\* | [0.88, 1.31] |  |  |  |  |  |  |
| conscientiousness | 0.17\*\* | [0.13, 0.21] | 0.15 | [0.12, 0.19] | .02 | [.01, .03] | .26\*\* |  |
| agreeableness | 0.50\*\* | [0.46, 0.54] | 0.42 | [0.39, 0.46] | .17 | [.14, .19] | .46\*\* |  |
|  |  |  |  |  |  |  |  | *R2*  = .235\*\* |
|  |  |  |  |  |  |  |  | 95% CI[.21,.26] |
|  |  |  |  |  |  |  |  |  |

*Note.* \* indicates *p* < .05; \*\* indicates *p* < .01. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights; *beta* indicates the standardized regression weights; *sr2* represents the semi-partial correlation squared; *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively.

Table 3

*Regression results using performance as the criterion*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Predictor | *b* | *b*  95% CI  [LL, UL] | *beta* | *beta*  95% CI  [LL, UL] | *sr2* | *sr2*  95% CI  [LL, UL] | *r* | Fit |
| (Intercept) | 0.76\*\* | [0.40, 1.12] |  |  |  |  |  |  |
| conscientiousness | 0.22\*\* | [0.15, 0.28] | 0.19 | [0.13, 0.24] | .03 | [.01, .05] | .29\*\* |  |
| agreeableness | 0.53\*\* | [0.46, 0.60] | 0.44 | [0.38, 0.50] | .18 | [.14, .23] | .49\*\* |  |
|  |  |  |  |  |  |  |  | *R2*  = .269\*\* |
|  |  |  |  |  |  |  |  | 95% CI[.22,.31] |
|  |  |  |  |  |  |  |  |  |

*Note.* \* indicates *p* < .05; \*\* indicates *p* < .01. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights; *beta* indicates the standardized regression weights; *sr2* represents the semi-partial correlation squared; *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively.

Table 4

*Regression results using performance as the criterion*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Predictor | *b* | *b*  95% CI  [LL, UL] | *beta* | *beta*  95% CI  [LL, UL] | *sr2* | *sr2*  95% CI  [LL, UL] | *r* | Fit |
| (Intercept) | 1.30\*\* | [1.03, 1.57] |  |  |  |  |  |  |
| conscientiousness | 0.15\*\* | [0.10, 0.19] | 0.14 | [0.09, 0.18] | .02 | [.01, .03] | .23\*\* |  |
| ­­­agreeableness | 0.48\*\* | [0.43, 0.53] | 0.40 | [0.36, 0.44] | .15 | [.12, .18] | .43\*\* |  |
|  |  |  |  |  |  |  |  | *R2*  = .204\*\* |
|  |  |  |  |  |  |  |  | 95% CI[.17,.23] |
|  |  |  |  |  |  |  |  |  |

*Note.* \* indicates *p* < .05; \*\* indicates *p* < .01. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights; *beta* indicates the standardized regression weights; *sr2* represents the semi-partial correlation squared; *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively.