**Results**

Before any analyses were run, cases which included missing data were excluded. Additionally, only a single participant reported their sex as “Other (specify),” and so their data was excluded from analyses. We completed data collection with 137 cases but analyzed 131 of these cases. After this cleaning, sex (female or male) was recoded to be 0 or 1 (0 = female, 1 = male). Scores on the second item of the Ten Item Personality Measure: Conscientiousness Subscale (3-year version) were reverse coded, meaning that scores of 1, 2, 3, 4, 5, 6, and 7 became 7, 6, 5, 4, 3, 2, and 1, respectively. Finally, three new variables were created out of the existing data, being the mean scores of our three measures.

**Model Characteristics**

The model used for the present analyses was a general linear model (GLM) with two numeric predictor variables (SPP = mean score on the Multidimensional Perfectionism Scale Short Form: Socially Prescribed Subscale (3 year version), CON = mean score on the Ten Item Personality Measure: Conscientiousness Subscale (3-year version)), one categorical predictor variable (sex = female or male), and a numeric outcome variable (NAf = mean score on the PANAS: Negative Affect (3 year version)). In terms of traditional statistical analyses, we conducted a multiple regression analysis with three predictor variables (two numeric, one categorical) and one numeric outcome variable.

Before discussing the results of the present study, we will first discuss the assumptions that were met (or not) by our model. First, regarding the assumption of homogeneity of variance, it appears as though the model does not violate this assumption, as the line-of-best-fit across the S-L plot is relatively straight and horizontal (see Figure 1). Moving onto the assumption of linearity, the residual dependence plot seems to indicate that the assumption is violated. At both extremes of the distribution, the line curves upward, suggesting slight curvilinearity (see Figure 1). This could be alleviated by addressing outliers in our data, which seem to be what is driving this relationship. Regarding normality of residuals, the histogram included in Figure 1 shows that the residuals are slightly right skewed, indicating that the residuals are not completely normal and that the assumption of normality of residuals is likely not met. This non-normality of residuals could be remedied by applying a transformation to the data. Finally, the assumption of independence of observations is met by our model as participants were not assessed at multiple time points nor were they, to our knowledge, related in any way. Overall, our model meets most assumptions, however, due to the chance of the residuals being non-normal and non-linear, the results of this study need to be interpreted with caution.

**Descriptive Statistics**

Out of the original 137 cases, 131 were included in analysis. Of these 131, 112 (85%) were female. The mean score on the Multidimensional Perfectionism Scale Short Form: Socially Prescribed Subscale (3 year version) was 4.38 (*SD* = 1.43). The mean score on the Ten Item Personality Measure: Conscientiousness Subscale (3-year version) was 5.03 (*SD* = 1.29). The mean score on our outcome measure, the PANAS: Negative Affect (3 year version), was 2.44 (*SD* = 0.98). There were significant correlations between all scale means, such that perfectionism scores were inversely correlated with conscientiousness scores (*r* = -.21) but directly correlated with negative affect scores (*r* = .37). There was also an inverse relationship between negative affect scores and conscientiousness (*r* = -.37). Table 1 contains the 95% confidence intervals for each correlation. Conscientiousness scores were approximately normally distributed but left skewed, which was the same for socially prescribed perfectionism. Negative affect scores were also approximately normally distributed, but right skewed.

**Hypothesis I**

Our first hypothesis was that s*ex, conscientiousness, and SPP will all significantly predict negative affect*, which was further composed of three predictions: 1) sex will predict negative affect (NAf), such that females had higher negative affect than males, 2) conscientiousness (CON) will be inversely related to NAf, and 3) socially prescribed perfectionism (SPP) would be positively associated with negative affect. To test this hypothesis, we ran two GLM models. One of these models included all our predictor variables, being sex, CON, and SPP to predict NAf (the full model). Our second model included none of these predictors (the reduced model). After running the full model, we were left with a model that explained 26.9% (*R2* = .269) of the variance in NAf scores [.13, .37]. The unstandardized coefficients for CON scores, sex, and SPP scores were -0.26 [-0.37, -0.14], -0.58 [-0.99, -0.16], and 0.20 [0.10, 0.31], respectively (see Table 2). None of the 95% confidence intervals cross 0, suggesting that the estimates are accurately reflecting the relationship between the predictor variables and our outcome. These unstandardized coefficients also indicate that each of our aforementioned hypotheses are supported. 1) Being female was predictive of higher NAf scores, as being male (i.e., having a score of 1) would predict a 0.58-point decrease in NAf scores. 2) CON scores were inversely predictive of NAf scores, as indicated by the negative sign of the unstandardized coefficient for CON which shows that for each 1-point increase in mean CON score, there is a 0.26-point decrease in mean NAf score. 3) SPP scores were positively predictive of NAf scores, as indicated by the positive sign on the unstandardized coefficient for SPP which shows that for each 1-point increase in SPP mean score, there is a 0.20-point increase in mean NAf score. To assure that these predictors were significantly predicting NAf scores, we ran a model comparison of our full and reduced models. We found that the model which included SPP scores, CON scores, and sex fit our data significantly better than the model which included no predictors. This was indicated by the full model having lower AIC and BIC and a markedly higher Bayes Factor that far exceeded 100 (see Table 3). The predicted differences between the models also shows that the model with SPP scores, CON scores, and sex included can predict up to a 1.48-point change in NAf scores, which is massive considering the small range of mean NAf scores (1-5). Taken together, these results indicate that being a female, having lower CON scores, and having higher SPP scores significantly predicts higher NAf scores.

**Hypothesis II**

Our second hypothesis was that *SPP will predict unique variance in negative affect over and above sex and conscientiousness in a meaningful way*. To test this hypothesis, we completed a second model comparison. In this comparison, we used the same full model (including SPP scores, CON scores, and sex as predictors of NAf scores) but a different reduced model. The reduced model in this comparison only included CON scores and sex as predictors of NAf scores. These models were chosen as the only difference between the two is the absence or presence of SPP scores as a predictor of NAf scores. This means if the full model fits our data better, then SPP scores are a meaningful predictor of NAf scores when accounting for CON scores and sex of the participants. After comparing the two models, we found that the full model which included SPP scores as a predictor fit our data better than the reduced model which did not include SPP scores as a predictor. Specifically, the full model had a lower AIC and BIC and a higher Bayes Factor which exceeded 100 (see Table 4). The predicted differences between the models also shows that the model with SPP scores included can predict up to a 0.64-point change in NAf scores. Considering that mean NAf scores range from 1 to 5, this differential is quite significant. The full model was also able to explain 8.4% more variance in NAf scores than the reduced model (see Table 4). This comparison indicates that SPP is a meaningful predictor of NAf scores after accounting for the variance explained by CON scores and sex.

**Discussion**

The present study sought to characterize the relationship between conscientiousness (CON), sex, socially prescribed perfectionism (SPP), and negative affect (NAf) as well as determine if socially prescribed perfectionism uniquely predicted variance in NAf. We found that a GLM with two numeric predictors (mean scores on the SPP and CON measures), one categorical predictor (sex), and one numeric outcome variable (mean NAf score) was able to predict approximately 27% of the variance in NAf scores, indicating that SPP scores, CON scores, and sex significantly predict NAf scores. Through the comparison of this model to a model excluding SPP scores as a predictor, we found that the model including SPP as a predictor was a better fit to our data, being able to explain 8.4% more variance in NAf scores than the reduced model. In sum, these results support both of our hypotheses, allowing us to conclude that SPP, CON, and sex are significant predictors of NAf and that SPP uniquely explains variance in NAf when CON and sex are accounted for.

Table 1:

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | *M* | *SD* | 1 | 2 |
|  |  |  |  |  |
| 1. SPP\_mean | 4.38 | 1.43 |  |  |
|  |  |  |  |  |
| 2. CON\_mean | 5.03 | 1.29 | -.21\* |  |
|  |  |  | [-.37, -.04] |  |
|  |  |  |  |  |
| 3. NAf\_mean | 2.44 | 0.98 | .37\*\* | -.37\*\* |
|  |  |  | [.21, .51] | [-.51, -.22] |
|  |  |  |  |  |

*Note.* *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). \* indicates *p* < .05. \*\* indicates *p* < .01.

Table 2:

*Regression results using NAf\_mean as the criterion*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Predictor | *b* | *Std Error* | *b*  95% CI  [LL, UL] | *sr2* | *sr2*  95% CI  [LL, UL] | Fit |
| (Intercept) | 2.93\*\* | 0.43 | [2.08, 3.77] |  |  |  |
| CON\_mean | -0.26\*\* | 0.06 | [-0.37, -0.14] | .11 | [.02, .20] |  |
| sex1 | -0.58\*\* | 0.21 | [-0.99, -0.16] | .04 | [-.02, .10] |  |
| SPP\_mean | 0.20\*\* | 0.05 | [0.10, 0.31] | .08 | [.00, .17] |  |
|  |  |  |  |  |  | *R2*  = .269\*\* |
|  |  |  |  |  |  | 95% CI[.13,.37] |
|  |  |  |  |  |  |  |

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

Table 3:

*Model comparison of full and reduced models for Hypothesis I*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | AIC | BIC | Bayes Factor | R2 | Adjusted R2 |
| NAf = b0 + b1\*CON + b2\*sex + b3\*SPP + e | 333.257 | 347.633 | 543039.5 | 0.269 | 0.252 |
| NAf = b0 + e | 368.293 | 374.043 | 0 | 0 | 0 |

*Note.* NAf = negative affect, CON = conscientiousness, SPP = social prescribed perfectionism

Table 4:

*Model comparison of full and reduced models for Hypothesis II*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | AIC | BIC | Bayes Factor | R2 | Adjusted R2 |
| NAf = b0 + b1\*CON + b2\*sex + b3\*SPP + e | 333.257 | 347.633 | 111.432 | 0.269 | 0.252 |
| NAf = b0 + b1\*CON + b2\*sex + e | 345.559 | 357.060 | 0.009 | 0.185 | 0.172 |

*Note.* NAf = negative affect, CON = conscientiousness, SPP = social prescribed perfectionism

Figure 1:

*Diagnostic plots for our full GLM*

