**Predicting Life Satisfaction from the Personality Traits Extraversion and Neuroticism: A Linear Mixed Effects Modeling Approach**

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This study examined how **extraversion** and **neuroticism** predict **satisfaction with life** across time using a linear mixed effects models framework. This modeling approach was selected because the dataset consisted of repeated daily assessments (Level 1) nested within individual participants (Level 2), and linear mixed models account for the non-independence of observations within individuals. The study tested three hypotheses: **(H1)** Extraversion will be positively associated with satisfaction with life; **(H2)** Neuroticism will be negatively associated with satisfaction with life; **(H3)** The effects of extraversion and neuroticism on satisfaction with life will be similar at Level 1 (within participants over time) and Level 2 (between participants).

**Results**

**Data Preparation**

The dataset was imported from SPSS format using the Haven package and prepared for analysis in R. The data included 4252 observations across 19 variables in long format, with repeated daily measures nested within 263 individual participants. To facilitate multilevel modeling, the participant ID variable (*id*) was recoded as a factor. This step helped ensure that the lmer() function would treat individual participants as separate grouping units in the mixed-effects models. Additionally, the day variable (*day*) was converted for a factor to a numeric variable. This step was taken in case day-level trends were explored later, and to make it easier to include time as a continuous variable if needed. No data were removed for missingness because linear mixed models are great at handling incomplete data under the assumption of missing at random.

**Descriptive Statistics and Bivariate Correlations**

Descriptive statistics and bivariate Pearson correlations were calculated to examine the average levels and interrelationships among the primary study variables: satisfaction with life, extraversion, and neuroticism. Table 1 presents the means, standard deviations, and correlation coefficients, along with their 95% confidence intervals.

On average, participants reported moderately high satisfaction with life (*M* = 4.43, *SD* = 1.61), based on a composite of items rated from 1 (strongly disagree) to 7 (strongly agree). This suggests that, overall, participants tended to agree with positive statements about their life satisfaction. Extraversion scores averaged 4.18 (*SD* = 1.52), indicating that participants generally reported being somewhat more outgoing, energetic, and socially engaged than not in their day-to-day experiences. Neuroticism scores averaged *M* = 3.49 (*SD* = 1.54), suggesting that, on average, participants reported experiencing a moderately low level of negative emotionality, such as anxiety, irritability, or mood swings, in their daily lives.

Bivariate Pearson correlations revealed statistically significant associations among all main study variables. Extraversion was positively correlated with satisfaction with life, r = .38, p < .01, 95% CI [.35, .41]. This means that participants who felt more outgoing and energetic also reported greater life satisfaction. The small p-value and confidence interval that excludes zero indicate this is a statistically significant and reliable association. **Neuroticism showed a negative correlation with satisfaction with life**, r = –.45, p < .01, 95% CI [–.47, –.43]. This suggests that participants who reported higher neuroticism tended to report lower life satisfaction. Again, the small *p*-value and confidence interval that excludes zero confirm that this negative relationship is statistically reliable. Extraversion and neuroticism were also negatively correlated with one another, r = –.33, p < .01, 95% CI [–.36, –.31]. This means that participants who scored higher on neuroticism were more likely to score lower on extraversion. This pattern was statistically significant (*p* < .01) with a confidence interval that does not include zero.

**Table 1**

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | ***M*** | ***SD*** | **1** | **2** |
| swl | 4.43 | 1.61 |  |  |
| tipm.E | 4.18 | 1.52 | .38\*\* |  |
|  |  |  | [.35, .41] |  |
| tipm.N | 3.49 | 1.54 | –.45\*\* | –.33\*\* |
|  |  |  | [–.47, –.43] | [–.36, –.31] |

*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.

**Univariate and Bivariate Visualizations**

To better understand how the key variables were distributed, univariate histograms were created for satisfaction with life, extraversion, and neuroticism (see Figure 1). The histogram for satisfaction with life (left panel) shows a distribution that is moderately left-skewed. Many participants selected values close to the upper end of the scale (i.e., around 6), indicating that higher life satisfaction was commonly reported. However, scores were spread across the full range of the scale, meaning that a wide variety of satisfaction levels were represented in the data. There were no strong signs of a ceiling or floor effect.

In the top right panel, the distribution of extraversion appears approximately normal, with most responses clustering around the middle of the scale. This suggests that participants reported a range of extraversion levels, with no strong skew or extreme outliers. The distribution indicates a relatively even balance between individuals who considered themselves more or less extraverted.

The bottom right panel shows the distribution of neuroticism, which was positively skewed. Most responses were concentrated on the lower end of the scale, meaning that many participants reported low levels of neuroticism. A smaller number of participants reported high neuroticism scores, creating a long tail toward the higher end. This pattern suggests that while neuroticism was generally low in the sample, there was still meaningful variation.

**Figure 1**

*Univariate distributions of satisfaction with life, extraversion, and neuroticism*

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*Note.* swl = satisfaction with life, tipm.E = extraversion, tipm.N = neuroticism.

To examine the relationships between the two personality traits and satisfaction with life, bivariate scatterplots were created with nonparametric smoothing lines (loess lines; see Figure 2). The left panel shows the relationship between extraversion and satisfaction with life. A clear upward trend is visible: as extraversion increases, reported satisfaction with life also tends to rise. This relationship appears approximately linear across the scale. The right panel shows the relationship between neuroticism and satisfaction with life. Here, the overall trend is negative: participants with higher neuroticism tend to report lower satisfaction with life. The curve is somewhat nonlinear, especially at the higher end of the neuroticism scale. This nonlinearity may indicate a threshold effect, where moderate levels of neuroticism are associated with relatively small decreases in life satisfaction, but extremely high levels are linked to disproportionately lower wellbeing.

Together, these visualizations offer preliminary support for H1 and H2. Extraversion showed a clear positive association with satisfaction with life, while neuroticism was negatively related. These patterns help justify proceeding with multilevel modeling to formally test the hypotheses.

**Figure 2**

*Bivariate scatterplots showing the relationships between extraversion (left), neuroticism (right), and satisfaction with life*

*A graph of a graph of a function

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*Note.* swl = satisfaction with life; tipm.E = extraversion; tipm.N = neuroticism.

**Baseline Model and Assumption Checks**

To determine whether multilevel modeling was appropriate, a baseline model (null model) was estimated using restricted maximum likelihood (REML). REML was selected because the model did not include any fixed predictors, and REML provides more accurate estimates of variance components in such cases. This baseline model included only a random intercept for participant ID allowing each participant to have their own average level of satisfaction with life. The model can be written as:

SWL*ij = β*0 + *u*0*j* + ε*ij*

where SWL*ij* represented the satisfaction with life score for observation *i* from participant *j*, *β*0 was the overall intercept, *u*0*j* is the random deviation for participant *j*, and ε*ij* was the residual error.

The intraclass correlation coefficient (ICC) for this baseline model was calculated to determine how much of the variation in satisfaction with life was due to stable, between-person differences versus day-to-day, within-person fluctuations. The ICC was 0.74, indicating that 74% of the total variance in life satisfaction was due to differences between individuals. The remaining 26% reflected within-person variability. A design effect of 12.30 (well above the commonly used threshold of 2.0) further supported this finding. These results indicated that repeated observations were not independent, violating a key assumption of traditional regression analysis. Because standard linear regression assumes all observations are independent, the presence of clustering (i.e., multiple observations nested within each participant) would lead to biased estimates and underestimated standard errors. Therefore, a multilevel (linear mixed effects) model was necessary to appropriately account for the nested data structure and provide valid inferences.

**Pre-Modeling Assumption Checks**

***Preliminary Linear Mixed Effects Model***

A preliminary linear mixed effects model was estimated using REML to evaluate the assumptions of linearity, normality, and homoscedasticity before fitting more complex models. REML was selected again because it provides less biased estimates of variance components when the goal is to evaluate model fit and check assumptions without comparing models that differ in fixed effects.

This model included fixed effects for extraversion and neuroticism and a random intercept for participant ID to account for repeated observations nested within individuals. The model can be represented in two levels. At **Level 1**, satisfaction with life for observation *i* from participant *j* was predicted by extraversion and neuroticism:

SWL*ij* = π0*j* + π1*j*(Extraversion*ij*) + π2*j*(Neuroticism*ij*) + ε*ij*

where π0*j* is the participant-specific intercept, π1*j* and π2*j* are fixed slopes for extraversion and neuroticism (held constant across participants), and ε*ij* is the residual error. At Level 2, the intercept was allowed to vary across participants:

π0*j* = *β*00 + *u*0*j*

π1*j* = *β*10

π2*j* = *β*20

where *β*00 is the mean intercept across all participants, *u*0*j* is the participant-specific deviation from that average, and *β*10 and *β*10 are fixed slopes for extraversion and neuroticism, respectively. Combining both levels yields the simplified mixed effects model:

SWL*ij* = *β*0 + *β*10(Extraversion*ij*) + *β*20(Neuroticism*ij*) + *u*0*j* + ε*ij*

where SWL*ij* represents the satisfaction with life score for observation *i* from participant *j*,  *β*0 is the overall (fixed) intercept, *β*10 and *β*20 are the fixed effects for extraversion and neuroticism, respectively, *u*0*j* is the random intercept for participant *j*, and ε*ij* is the residual error.

***Assumption Checks***

Residuals were plotted against each predictor to examine whether the relationship between extraversion and satisfaction with life was linear and exhibited constant variance. Residuals were approximately evenly scattered across levels of extraversion without a clear pattern, supporting the assumption of linearity and homoscedasticity. In contrast, the residuals plotted against neuroticism revealed a subtle downward trend, suggesting slight non-linearity. However, residuals remained roughly centered around zero and showed no dramatic funneling, indicating that the violation was minor. If stronger non-linearity had been observed, one potential solution would be to include a quadratic term, though that is outside the scope of this course.

The histogram of residuals showed a bell-shaped distribution, and the Q–Q plot showed that most residuals closely followed the expected theoretical line. Small deviations at the tails were observed but are common in large samples and not considered problematic. Together, these results indicate that the normality assumption was sufficiently met.

The residuals vs. fitted-values plot demonstrated some heteroscedasticity. Residuals were more widely dispersed at lower predicted values of satisfaction with life and became more concentrated as predicted values increased. This violation was mild and did not indicate a major threat to model validity.

Multicollinearity was assessed and ruled out. The correlation between extraversion and neuroticism was moderate (r = –.33), well below the threshold of concern (|r| > .80). This suggests that both variables can be included in the same model without concern for overlapping influence.

Across all diagnostics, assumptions of linearity, homoscedasticity, and normality were reasonably met. Although minor deviations were noted, such as mild heteroscedasticity and slight non-linearity with neuroticism, there were no serious violations. These findings supported proceeding with more complex mixed effects models to test study hypotheses.

**Model Building and Comparison**

To test H1 and H2, a series of nested linear mixed models were estimated using REML. All models included a random intercept for participant ID to account for the nested structure of the data. Model 1 included extraversion as a fixed effect predictor of satisfaction with life. Model 2 added a random slope for extraversion, allowing for the strength of the extraversion and satisfaction with life relationship to vary across individuals. Model 3 introduced neuroticism as an additional fixed effect. Model 4 extended this model by including random slopes for both extraversion and neuroticism.

All models were fit using REML, which is preferred for estimating models when comparing random effect structures. However, when conducting model comparisons, the models were re-estimated using maximum likelihood (ML) estimation. ML is appropriate when comparing models that differ in their fixed effects (e.g., adding new predictors), and the Flexplot package automatically refits models using ML for all comparisons.

The first comparison tested whether including a random slope for extraversion (Model 2) improved model fit beyond a fixed slope model (Model 1). This comparison showed a substantial improvement in fit, with the AIC decreasing from 10,945.67 to 10,865.86 and the BIC decreasing from 10,971.08 to 10,903.99. A Bayes Factor of approximately 3.72 × 10¹⁴ indicated decisive evidence in favor of the random slope model. These results supported the inclusion of random slopes for extraversion, suggesting that the relationship between extraversion and satisfaction with life varied across individuals.

Next, the addition of neuroticism as a fixed effect was evaluated. The model including neuroticism (Model 3) yielded improved fit over the previous model, with the AIC decreasing from 10,865.86 to 10,498.33 and the BIC from 10,903.99 to 10,542.81. The Bayes Factor (≈ 2.68 × 10⁷⁸) provided overwhelming evidence in favor of including neuroticism, indicating that it contributed unique explanatory power in predicting satisfaction with life above and beyond extraversion.

Finally, a model with random slopes for both extraversion and neuroticism (Model 4) was compared to the model with only a random slope for extraversion. Model 4 demonstrated superior fit, with an AIC of 10,364.47 and BIC of 10,428.02. The Bayes Factor (≈ 8.46 × 10²⁴) strongly favored the more complex model. Although the estimated slope variances were modest (Extroversion: σ² = 0.02; Neuroticism: σ² = 0.04), their inclusion improved model performance and accounted for meaningful variability in how personality traits were associated with satisfaction with life across individuals.

The fourth and final model can be expressed using a two-level linear mixed-effects equation. At Level 1 (within-person), daily satisfaction with life for observation i from participant j was predicted by extraversion and neuroticism as follows:

SWL*ij* = *β*0*j* + *β*1*j*(Extraversion*ij*) + *β*2*j*(Neuroticism*ij*) + ε*ij*

Here, *β*0*j* is the intercept, *β*1*j* and *β*2*j* represent participant-specific slopes for extraversion and neuroticism, respectively, and ε*ij* is the residual error. At Level 2 (between-person), each of the Level 1 coefficients are modeled as a function of fixed effects and random deviations:

*β*0*j* = π00 + *u*0*j*

*β*0*j* = π10 + *u*1*j*

*β*0*j* = π20 + *u*2*j*

In these equations, π00, π10, and π20 are the fixed (average) intercept and slopes across all participants. The terms *u*0*j*, *u*1*j*, and *u*2*j* are participant-specific random effects. The combined equation for Model 4 is as follows:

SWL*ij* = *β*00 + *β*10(Extraversion*ij*) + *β*20(Neuroticism*ij*) + *u*0*j* + *u*1*j*(Extraversion*ij*) + *u*2*j*(Neuroticism*ij*) + ε*ij*

In this equation, *β*00 reflects the overall life satisfaction score in the sample, *β*10 and *β*20 represent the fixed slopes for extraversion and neuroticism, respectively. *u*0*j* represents the random intercept, *u*1*j* and *u*2*j* are the random slopes for extraversion and neuroticism, respectively, and ε*ij* represents the residual error. This model captures both fixed effects (population-level estimates) and random effects (individual-level deviations) for each predictor and the intercept.

**Final Model 4 Estimates**

As shown in Table 2, both extraversion and neuroticism significantly predicted satisfaction with life. Extraversion was positively associated with satisfaction with life, b = 0.16, SE = 0.02, t(206.06) = 10.55, p < .001, 95% CI [0.13, 0.19]. This indicates that, on average, for every one-unit increase in extraversion, satisfaction with life increased by 0.16 points. The effect size is modest, and the narrow confidence interval that does not include zero suggests the effect is both statistically reliable and precise. Neuroticism was negatively associated with satisfaction with life, b = –0.21, SE = 0.02, t(250.44) = –12.32, p < .001, 95% CI [–0.24, –0.18]. This means that for every one-unit increase in neuroticism, satisfaction with life decreased by approximately 0.21 points. This effect is slightly stronger than that of extraversion, and the confidence interval also excludes zero, indicating a robust and statistically significant negative association. The model intercept was b = 4.51, SE = 0.12, t(229.52) = 38.10, p < .001, which reflects the predicted satisfaction with life score for a participant with average levels (i.e., zero-centered values) of both extraversion and neuroticism. This means that the average predicted life satisfaction for a person with typical personality scores was approximately 4.51 on a 7-point scale, suggesting that most participants reported moderately high life satisfaction.

Random effects revealed considerable between-person variability in baseline levels of satisfaction with life. The standard deviation of the random intercept was 1.42, indicating that participants’ average life satisfaction scores differed by approximately ±1.42 points from the overall sample mean. This reflects substantial heterogeneity in individuals’ typical satisfaction with life levels. Additionally, the random slope standard deviation for extraversion was 0.14, suggesting that the strength of the association between extraversion and life satisfaction varied across participants by about ±0.14 points per one-unit change in extraversion. Similarly, the standard deviation for the neuroticism slope was 0.19, indicating that the effect of neuroticism on life satisfaction also differed across individuals by roughly ±0.19 points per one-unit change in neuroticism. These estimates reflect meaningful individual differences in how personality traits relate to life satisfaction, supporting the inclusion of random slopes in the model to account for this variability.

Together, these results supported H1 and H2, confirming that higher extraversion was linked to greater life satisfaction and higher neuroticism was linked to lower life satisfaction. However, H3 was not directly tested in Model 4, as it did not include decomposed within- and between-person components of the predictors. Although random slope variance suggests that the strength of effects varied across individuals, the question of whether the effects were *similar* at both the within- and between-person levels was addressed in a separate model (Model 5) that disaggregated these components.

**Table 2**

*Fixed effects estimates and model fit statistics for the final model (model 4)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Predictor** | ***b*** | ***SE*** | ***t*(df)** | ***p*** | **95% CI** |
| Fixed Effects |  |  |  |  |  |
| (Intercept) | 4.51 | 0.12 | 38.10 (229.52) | < .001 | [4.27, 4.74] |
| Extraversion | 0.16 | 0.02 | 10.55 (206.06) | < .001 | [0.13, 0.19] |
| Neuroticism | –0.21 | 0.02 | –12.33 (250.44) | < .001 | [–0.24, –0.18] |
|  |  |  |  |  |  |
| **ICC** |  |  |  |  |  |
| Adjusted | 0.77 |  |  |  |  |
| Unadjusted | 0.69 |  |  |  |  |
|  |  |  |  |  |  |
| **R²** |  |  |  |  |  |
| Conditional | 0.79 |  |  |  |  |
| Marginal | 0.09 |  |  |  |  |

*Note.* Model 4 includes fixed effects for extraversion and neuroticism, random intercepts, and random slopes for both predictors. ICC = intraclass correlation coefficient. Marginal R² reflects variance explained by fixed effects only; conditional R² reflects variance explained by both fixed and random effects.

***Final Model Diagnostics***

Model diagnostics for Model 4 indicated that the residuals met most assumptions reasonably well, though some minor violations were observed (see Figure 3). The histogram of residuals showed a bell-shaped, symmetric distribution centered around zero, suggesting that the residuals were approximately normally distributed. This supports the assumption of normality, which is important for valid hypothesis testing and confidence interval estimation.

The residual dependence plot (top-right) displayed a slight funnel-shaped pattern, with greater variability in residuals at lower levels of predicted satisfaction with life. This indicates minor heteroscedasticity. That is, the model tended to predict scores more accurately for participants with higher life satisfaction, while predictions were slightly more variable among those with lower satisfaction. The spread-level (S-L) plot (bottom) confirmed this pattern, showing that the absolute values of residuals decreased as predicted values increased. Although the slope of the blue loess line is slightly negative, indicating mild heteroscedasticity, the deviation was not extreme and did not suggest a serious threat to model validity. Overall, these plots suggest that the model fits the data well, with only minor violations of the homoscedasticity assumption.

The model accounted for a substantial proportion of the variance in satisfaction with life. The **conditional R²**, which reflects the combined explanatory power of both fixed effects (extraversion and neuroticism) and random effects (individual-specific intercepts and slopes), was **0.79**, meaning that 78.9% of the variability in life satisfaction was explained by the model. In contrast, the **marginal R²**, which includes only the fixed effects, was **0.09**, indicating that extraversion and neuroticism alone accounted for 9% of the variance in satisfaction with life. The large difference between these values suggests that the majority of variability in life satisfaction was due to stable, person-level differences not fully captured by the personality predictors.

The model produced a minor convergence warning (max|grad| = 0.00265; tolerance = 0.002), indicating that the optimizer nearly met the convergence threshold. This type of warning is common in complex models that include random slopes. Although the assignment instructions said to proceed, it is worth noting that minor convergence issues can sometimes be resolved by increasing the number of iterations the optimizer is allowed to run, switching to a different optimizer, or simplifying the model structure slightly (e.g., removing a random slope if it’s not necessary). In this case, the warning was small and did not affect interpretation of the results, so Model 4 was retained as the final model and used to test H1 and H2.

**Figure 3**

*Residual diagnostic plots for the final mixed effects model*

A group of graphs showing residuals

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**Hypothesis 3: Testing Within- and Between-Person Effects**

To evaluate H3, a new linear mixed-effects model (Model 5) was fit using disaggregated predictors. Each personality variable was separated into two components using person-mean centering: a within-person variable representing daily deviations from an individual’s average (Level 1), and a between-person variable representing the individual’s mean score across all days (Level 2). Model 5 included fixed effects for all four disaggregated predictors and a random intercept for participant ID.

To examine whether the disaggregated model improved statistical fit compared to the final selected model (Model 4), a likelihood-based model comparison using ML was conducted. Model 5 provided theoretical precision by estimating within- and between-person effects separately but showed worse fit statistics (AIC = 10,516.40; BIC = 10,574.88) than Model 4 (AIC = 10,364.47; BIC = 10,428.02). Median predicted differences between models were minimal (0.062), indicating negligible practical benefit.

However, Model 5 was not intended to replace Model 4 but to directly test H3. Unlike prior models, Model 5 isolated daily fluctuations (within-person) from stable trait differences (between-person), making it uniquely suited to evaluate whether the effects of personality on life satisfaction were consistent across levels.

All fixed effects were statistically significant (see Table 3). At the within-person level, increases in extraversion were associated with higher satisfaction with life, b = 0.15, SE = 0.01, t(3986.15) = 12.73, p < .001, 95% CI [0.13, 0.17]. This indicates that on days when participants reported feeling more extraverted than their personal average, they also reported life satisfaction scores approximately 0.15 points higher. The small standard error, large t value, and confidence interval that excludes zero all support the precision and statistical reliability of this effect. In contrast, increases in daily neuroticism were associated with lower satisfaction with life, b = –0.22, SE = 0.01, t(3986.15) = –19.36, p < .001, 95% CI [–0.24, –0.20]. On days when participants felt more neurotic than usual, their life satisfaction scores were approximately 0.22 points lower. This negative association was also strong and statistically robust given the small standard error, large *t* value, and confidence interval that does not include zero.

At the between-person level, trait extraversion predicted higher average satisfaction with life, b = 0.36, SE = 0.07, t(257.89) = 5.33, p < .001, 95% CI [0.23, 0.49]. Individuals who were more extraverted on average than their peers reported life satisfaction scores approximately 0.36 points higher. This effect was statistically significant and precisely estimated, as reflected by the narrow confidence interval and large t value. In contrast, trait neuroticism was associated with lower average satisfaction with life, b = –0.52, SE = 0.07, t(258.21) = –7.81, p < .001, 95% CI [–0.66, –0.39]. Participants who were higher in trait neuroticism reported life satisfaction scores that were, on average, 0.52 points lower than those who reported less neuroticism. The small *p*-value and narrow confidence interval indicate the effect was strong and statistically robust. Model 5 also accounted for substantial variance (conditional R² = 0.79), with 69% of variance attributable to stable individual differences (ICC = 0.69) and 30.5% explained by the predictors (marginal R² = 0.31).

Altogether, these results provide partial support for H3. The effects of both extraversion and neuroticism on life satisfaction were statistically significant, consistent in direction, and present at both within- and between-person levels. However, the between-person effects were larger than the within-person effects, suggesting that stable, trait-level differences account for more variance in life satisfaction than day-to-day fluctuations in personality.

**Table 3**

*Fixed effects estimates for within- and between-person effects (disaggregated model)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Predictor** | ***b*** | ***SE*** | ***t*(df)** | ***p*** | **95% CI** |
| (Intercept) | 4.76 | 0.44 | 10.86 (257.26) | < .001 | [3.90, 5.63] |
| Extraversion (within) | 0.15 | 0.01 | 12.73 (3986.15) | < .001 | [0.13, 0.17] |
| Extraversion (between) | 0.36 | 0.07 | 5.33 (257.89) | < .001 | [0.23, 0.49] |
| Neuroticism (within) | –0.22 | 0.01 | –19.36 (3986.15) | < .001 | [–0.24, –0.20] |
| Neuroticism (between) | –0.52 | 0.07 | –7.81 (258.21) | < .001 | [–0.66, –0.39] |

*Note.* Adjusted ICC = 0.69; Unadjusted ICC = 0.48; Marginal R² = 0.31; Conditional R² = 0.79.

**Conclusion**

This study found that extraversion and neuroticism are meaningful predictors of how satisfied people feel with their lives. Supporting H1, people who were more **extraverted** (i.e., outgoing, energetic, and socially engaged) tended to report **higher life satisfaction**. Supporting H2, people who were more **neurotic** (i.e., prone to negative emotions like anxiety or irritability) reported **lower life satisfaction**. For H3, the results showed that both daily changes and stable personality traits matter. On days when someone felt more extraverted than usual, they also felt more satisfied with life; when they felt more neurotic than usual, their satisfaction went down. However, stable, long-term personality traits explained **more of the variation** in life satisfaction than daily ups and downs. While both levels are important, who you are most of the time may matter more for how satisfied you are with life than how you feel on any single day.