# Relationship Between Personality Traits and Romantic Relationship Satisfaction among Young Adults

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**Abstract**

Young adults (18–25 years) in romantic non-marital relationships face unique challenges shaped by digital connectivity and shifting social norms. Although personality traits are often considered predictors of romantic outcomes, contextual factors may be more influential in modern dating. The quantitative research design is used for the present study and the objectives are to examine (1) the relationship between personality traits and romantic relationship satisfaction (2) The relationship between relationship duration and romantic relationship satisfaction (3) the correlation between romantic relationship satisfaction and comfortability in sharing romantic relationship through online (4) to examine the gender differences in romantic relationship satisfaction (5) to examine the differences in romantic relationship satisfaction among the birth order. A sample of 202 young adults participated in the study. The data was collected using the Big Five Inventory-2 Short Form (BFI-2-S) and the Relationship Assessment Scale (RAS). The data was analysed by SPSS version 24. Results showed no significant correlation between personality traits and romantic relationship satisfaction. However, there is significant correlation between relationship duration and romantic relationship satisfaction. There is also gender differences in the romantic relationship satisfaction. Results have implications for relationship education and therapeutic support in contemporary romantic relationship contexts. *Keywords:* Big Five personality traits, relationship satisfaction, young adults, contextual factors, birth order, social media, modern dating

**Keywords:** Personality Traits, Romantic Relationship Satisfaction, Young Adults

Romantic relationships during emerging adulthood represent a critical developmental context that influences long-term mental health, life satisfaction, and interpersonal functioning (Arnett et al., 2014). Romantic Relationship satisfaction is the subjective evaluation of one's romantic partnership and has been consistently linked to lower depression, higher self-esteem, and greater overall well-being (Proulx et al., 2017). Despite its importance, relationship satisfaction in young adults appears increasingly complex due to rapid sociocultural changes, particularly the integration of digital communication and evolving gender roles. Personality traits especially neuroticism, agreeableness, and conscientiousness have been viewed as

robust predictors of relationship outcomes (McNulty, 2016). Meta-analyses suggest that low neuroticism and high agreeableness facilitate constructive conflict resolution and emotional support, thereby enhancing satisfaction (Malouff et al., 2010). However, recent critiques argue that broad personality measures may overestimate trait influence when contextual and situational variables are not adequately controlled (Weidmann et al., 2018). In digitally mediated relationships, factors such as comfort with online self-disclosure and social media integration may play equally or more important roles (Papp et al., 2022).
Relationship duration remains one of the most consistent predictors of satisfaction. Longitudinal studies document a normative decline in satisfaction after the honeymoon phase, attributed to habituation, increased conflict, and the transition from passionate to companionate love (Lavner & Bradbury, 2010). This pattern appears particularly pronounced in non-marital relationships of young adults, where commitment levels are still forming. Birth order has long been theorized to shape interpersonal styles (Sulloway, 1996). Firstborns are described as more responsible and achievement-oriented, whereas later-borns are seen as rebellious and sociable traits that could differentially affect romantic functioning. Although early studies supported birth-order effects, large-scale replications have largely failed to find meaningful associations with adult personality or life outcomes (Rohrer et al., 2015; Damian & Roberts, 2015). Nonetheless, birth order may still influence relationship dynamics through family-learned communication patterns.
The pervasive role of social media in modern romance introduces a novel variable: comfort with digital relationship expression. Couples increasingly use platforms to maintain connection, display affection publicly, and coordinate daily lives (Drouin et al., 2015). Higher comfort with such behaviors may enhance perceived responsiveness and closeness, thereby boosting satisfaction (McDaniel & Coyne, 2016).
Gender differences in relationship satisfaction have been inconsistently reported. Some studies suggest women report lower satisfaction due to higher emotional expectations and greater awareness of relationship problems (Jackson et al., 2014), while others find no meaningful differences once measurement and sampling biases are addressed. Similarly, urban–rural residence may influence satisfaction through differences in social networks, dating pools, and lifestyle stress, though empirical evidence remains sparse in developing contexts.
Given the mixed findings and the unique socio-digital environment of contemporary young adults, the present study sought to comprehensively examine both traditional (personality, duration, gender, birth order) and modern (social media comfort, region) predictors of relationship satisfaction in a non-Western emerging adult sample.

## Method

### Participants

Participants were 202 young adults (58.4% female, 41.6% male) aged 18–25 currently involved in non-marital romantic relationships. The majority (70.3%) resided in urban areas. Participants were predominantly undergraduate and postgraduate students recruited from universities.

### Measures

**Relationship Satisfaction.** The 7-item Relationship Assessment Scale (RAS; Hendrick et al., 1998) was used (e.g., “How good is your relationship compared to most?”). Items were rated on a 5-point Likert scale. The RAS has demonstrated excellent reliability ($\alpha > .85$) and validity across cultures. In the present study, Cronbach’s $\alpha = .88$.

**Personality Traits.** The Big Five Inventory-2 Short Form (BFI-2-S; Soto & John, 2017) assessed extraversion, agreeableness, conscientiousness, neuroticism, and openness (12 items per domain, total 60 items). Respondents rated agreement on a 5-point scale. The BFI-2-S shows strong reliability and structural validity. A global personality favorability composite was created for primary analyses ($\alpha = .79$).
**Demographics.** Gender, birth order (only child, oldest, middle, youngest), and residence (rural/urban) were collected via single items.

**Procedure**

Data were collected from the young adults residing at Kerala. The data was collected online through google forms. Google form of the all the items in the 2 instrument along with personal data sheet was prepared. For collecting data, the researcher collected number of contacts reaching young adults. Investigator prepared a request letter at the first page of the Google form for the whole hearted participation from the participants and those who were agree to participate can fill the Google form. Initially Google form was sent to more than 300 participants but only 202 were responded. Google sheet were coded in excel sheet and spread into the statistical package and finally there were 150 valid responses used for analysis.

**Data Analysis**

Preliminary analyses revealed significant violations of normality for relationship satisfaction and several predictors (Kolmogorov-Smirnov $p < .001$). Accordingly, non-parametric tests were employed using SPSS version 24: Spearman's rho for correlations, Mann-Whitney U for two-group comparisons (gender, region), and chi-square test of independence for birth order (with follow-up standardized residuals). Alpha was set at .05 (two-tailed).

**RESULT & DISCUSSION**

**Table 1**
**Correlation between personality and relationship satisfaction**

| | | | Personality trait | Relationship satisfaction |
|---|---|---|---|---|
| Spearman's rho | Personality trait | Correlation Coefficient | 1.000 | .000 |
| | | Sig. (2-tailed) | . | .995 |
| | | N | 202 | 202 |
| | Relationship satisfaction | Correlation Coefficient | .000 | 1.000 |
| | | Sig. (2-tailed) | .995 | . |
| | | N | 202 | 202 |

Table 1 shows details of correlation coefficient between personality and relationship satisfaction. The significant value was found to be .995 (p>0.01), this indicates that there is no significant correlation between these two factors.
A Spearman's rank-order correlation was performed to examine the association between personality and relationship satisfaction in the full sample (N = 202). The analysis yielded a correlation coefficient of $\rho(200) = .000$, $p = .995$ (two-tailed). The observed association was essentially zero and far from statistical significance ($p > .99$). Thus, the null hypothesis could not be rejected. In the present sample, no meaningful

relationship was found between participants' personality scores and their level of relationship satisfaction. This non-significant result aligns with a growing body of contemporary research suggesting that broad, single-item or poorly specified measures of "personality" typically explain little to no variance in relationship outcomes once more specific traits (e.g., the Big Five, attachment style, or emotional stability) are considered (McNulty, 2016; Weidmann et al., 2018). The complete absence of association here likely reflects the limitations of the personality measure employed, which appears to have been either a single global item or an unvalidated composite that lacks sufficient reliability and theoretical precision to detect meaningful individual differences in romantic functioning.

**Table 2**
**Correlation between relationship satisfaction and duration of relationship**

| | | | Relationship satisfaction | Duration of relationship |
|---|---|---|---|---|
| Spearman's rho | Relationship satisfaction | Correlation Coefficient | 1.000 | -.211** |
| | | Sig. (2-tailed) | . | .003 |
| | | N | 202 | 202 |
| | Duration of relationship | Correlation Coefficient | -.211** | 1.000 |
| | | Sig. (2-tailed) | .003 | . |
| | | N | 202 | 202 |

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4 shows details of correlation coefficient between duration of relationship and relationship satisfaction. The significant value was found to be .003 ($p<0.01$), this indicates that there is significant correlation between these two factors. A Spearman's rank-order correlation was conducted to assess the association between relationship duration and relationship satisfaction in the full sample ($N = 202$). A non-parametric approach was appropriately chosen given the likelihood that relationship duration was positively skewed. Results revealed a statistically significant negative correlation, $\rho(200) = -.211$, $p = .003$ (two-tailed). The association was significant at the .01 level. Relationship duration explained approximately 4.5% of the variance in relationship satisfaction ($\rho^2 = .045$), indicating a small but meaningful effect. This finding suggests that longer relationships were associated with slightly lower levels of reported satisfaction. The result is consistent with a substantial body of longitudinal research demonstrating that relationship satisfaction tends to decline gradually over time, particularly after the initial honeymoon period (e.g., Karney & Bradbury, 1997; Lavner & Bradbury, 2010; Proulx et al., 2017). The modest magnitude observed here is typical of cross-sectional studies and likely reflects the combined influence of habituation, increased responsibilities, unresolved conflict accumulation, and the fading of passionate love components.

It is important to note that the correlation, while statistically significant, remains small, and the majority of variance in satisfaction is unrelated to relationship length. Moreover, cross-sectional designs cannot distinguish cohort effects or selection effects (e.g., highly satisfied couples may be more likely to remain together longer) from true within-couple declines over time.

**Table 3**
**Correlation between relationship satisfaction and social media comfort**

| | | Relationship satisfaction | Social media comfort |
|---|---|---|---|
| Relationship satisfaction | Pearson Correlation | 1 | .270** |
| | Sig. (2-tailed) | | .000 |
| | N | 202 | 202 |
| Social media comfort | Pearson Correlation | .270** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 202 | 202 |

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3 shows details of correlation coefficient between social media comfort and relationship satisfaction. The significant value was found to be .000 ($p<0.01$), this indicates that there is significant correlation between these two factors.
A Pearson product-moment correlation was conducted to examine the association between social media comfort and relationship satisfaction in the full sample ($N = 202$). Results revealed a statistically significant positive correlation, $r(200) = .270$, $p < .001$ (two-tailed). The correlation was significant at the .01 level. Approximately 7.3% of the variance in relationship satisfaction was explained by individual differences in social media comfort ($r^2 = .073$), representing a small-to-medium effect size according to Cohen's (1988) guidelines. This finding indicates that participants who reported greater comfort and ease with using social media also tended to report higher levels of satisfaction in their romantic relationships. The result aligns with emerging research suggesting that digital communication skills and comfort with social platforms can facilitate relationship maintenance behaviors (e.g., staying connected, expressing affection publicly, and coordinating daily life), which in turn contribute to greater relationship satisfaction (Drouin et al., 2015; McDaniel & Coyne, 2016; Papp et al., 2022). However, the modest magnitude of the correlation suggests that social media comfort is only one of many factors influencing relationship satisfaction. The direction of causality remains unclear: individuals in satisfying relationships may feel more comfortable sharing aspects of their relationship online, or conversely, higher social media comfort may enhance relationship quality through improved communication and social support.

**Table 4**
**Gender difference in relationship satisfaction**

| | Gender | N | Mean Rank | Sum of Ranks |
|---|---|---|---|---|
| Relationship satisfaction | Females | 118 | 110.67 | 13059.50 |
| | Males | 84 | 88.61 | 7443.50 |
| | Total | 202 | | |

**Table 5**
**The Mann-Whitney U, Wilcoxon W, Z and p value of the variable**

| | Relationship satisfaction |
|---|---|
| Mann-Whitney U | 3873.500 |
| Wilcoxon W | 7443.500 |
| Z | -2.658 |
| Sig. (2-tailed) | .008 |
| a. Grouping Variable: gender | |

Table 4 and revealed that gender difference in relationship satisfaction showed a significant difference of .008 ($p<0.05$). When comparing the mean score of relationship satisfaction of females (Mean= 110.67) with the relationship satisfaction in males (Mean= 88.61), it can be seen that females have better relationship satisfaction.

The present study examined gender differences in relationship satisfaction using a non-parametric Mann-Whitney U test, as the dependent variable violated the assumption of normality. A total of 202 participants were included in the analysis. Ranks analysis indicated that Female (Mean Rank = 110.67) reported higher relationship satisfaction than Male (Mean Rank = 88.61). The Mann-Whitney U statistic was 3873.50 (Wilcoxon W = 7443.50), with standardized test statistic of $Z = -2.658$. The two-tailed asymptotic significance level ($p = .008$) Thus, the null hypothesis of no difference in relationship satisfaction between the two gender groups was rejected. A statistically significant gender difference in relationship satisfaction was observed, whereby participants in females reported significantly higher levels of relationship satisfaction than participants in males ($U = 3873.50$, $p = .008$, two-tailed).

Although the direction of the difference favors females, the effect size (calculated as $r = Z/\sqrt{N}$) was $r = -2.658/\sqrt{202} \approx -.187$, representing a small-to-medium effect according to Cohen's (1988) guidelines ($|r| \approx .10$ = small, $|.30|$ = medium). This suggests that while the difference is statistically reliable, gender explains only a modest proportion of the variance in relationship satisfaction scores.

These findings align with some previous research indicating gender differences in perceived relationship quality (e.g., Jackson et al., 2014), but contradict meta-analytic evidence suggesting negligible overall gender differences in relationship satisfaction when large, representative samples are examined (Karney & Bradbury, 2020). The discrepancy may be attributable to the specific operationalization of gender in the current study (coded dichotomously as 1 and 2), sampling characteristics, or cultural/contextual factors not measured here. Future research should clarify the coding of gender categories, replicate the analysis with larger and more diverse samples, and include potential moderators (e.g., relationship length, sexual orientation, or socio-economic status) to better understand the practical significance and boundary conditions of the observed difference.

**Table 6**
**Birth order difference in relationship satisfaction**

| | Observed N | Expected N | Residual |
|---|---|---|---|
| Youngest child | 75 | 50.5 | 24.5 |

| | | | |
|---|---|---|---|
| Oldest child | 86 | 50.5 | 35.5 |
| Middle child | 10 | 50.5 | -40.5 |
| Only child | 31 | 50.5 | -19.5 |
| Total | 202 | | |

**Table 7**
**Chi-Square, degree of freedom and p value**

| | Relationship satisfaction | Birth order |
|---|---|---|
| Chi-Square | 215.980[a] | 76.851[b] |
| df | 23 | 3 |
| Asymp. Sig. | .000 | .000 |

Table 6 and 7 revealed that birth order difference in relationship satisfaction showed a significant difference of .000 ($p<0.05$). When comparing the observed Mean score of relationship satisfaction of youngest child (Mean= 75), oldest child (Mean= 86), Middle child (Mean= 10) with the relationship satisfaction in only child (Mean= 31), oldest child can be seen having better satisfaction in relationship
A chi-square test of independence was conducted to examine whether relationship satisfaction differed as a function of birth order categorized into four groups: (1) youngest child, (2) middle child, (3) oldest child, and (4) only child. The total sample consisted of 202 participants.
The observed frequencies deviated substantially from the expected frequencies under the null hypothesis of no association (see Table 7). Notably, youngest children were heavily over-represented in the higher satisfaction categories (residual = +24.5), whereas oldest children were markedly under-represented (residual = -40.5). Only children (n = 31) and middle children (n = 10) showed smaller deviations.
The Pearson chi-square test yielded a highly significant result, $\chi^2(23, N = 202) = 215.980, p < .001$. Given that the note accompanying the table reports an asymptotic significance of .000 ($p < .001$) and explicitly compares mean scores across groups (youngest child Mean = 86, middle child Mean = 10, oldest child Mean = 75, only child Mean = 31), it is evident that relationship satisfaction was not independent of birth order.
Post-hoc inspection of standardized residuals and the reported mean satisfaction scores indicates a clear pattern: youngest children reported the highest levels of relationship satisfaction, followed by oldest children, with middle children and only children reporting substantially lower satisfaction. This finding is consistent with some prior literature suggesting that birth order influences personality traits and interpersonal outcomes in adulthood (Sulloway, 1996; Rohrer et al., 2015), particularly the tendency for youngest children to report higher positive affect and sociability, which may translate into greater ease or satisfaction in romantic relationships.
However, the effect appears unusually large compared to contemporary large-scale studies that typically find small or null birth-order effects on broad personality and life outcomes (Rohrer et al., 2015; Damian & Roberts, 2015). The extreme chi-square value and the very low observed frequencies in some cells (e.g., middle children n = 10) raise the possibility that the relationship satisfaction measure may have contained a large number of tied ranks or that the satisfaction variable was treated as ordinal with many categories, inflating the degrees of freedom and the test statistic.
Future research should replicate this finding using larger and more balanced samples across birth-order categories, report effect-size measures (e.g., Cramér's V), and control for potential confounds such as

family size, age, and socioeconomic status. Nevertheless, the current results provide strong preliminary evidence that birth order is significantly associated with relationship satisfaction in this sample, with youngest children exhibiting the highest and middle/only children the lowest levels of satisfaction, $\chi^2(23) = 215.98$, $p < .001$.

**Table 8**
**Gender difference in social media comfort**

| | gender | N | Mean Rank | Sum of Ranks |
|---|---|---|---|---|
| Social media comfort | 1 | 118 | 100.66 | 11878.00 |
| | 2 | 84 | 102.68 | 8625.00 |
| | Total | 202 | | |

**Table 9**
**Mann-Whitney U, Wilcoxon W, Z and p value**

| | Social media comfort |
|---|---|
| Mann-Whitney U | 4857.000 |
| Wilcoxon W | 11878.000 |
| Z | -.249 |
| Asymp. Sig. (2-tailed) | .803 |
| a. Grouping Variable: gender | |
| | |

Table 8 and 9 revealed that birth order difference in relationship satisfaction showed a significant difference of .803 (p>0.05). When comparing Mean rank score of relationship satisfaction of female (Mean= 100.66) with relationship satisfaction in males (Mean= 102.68). Males can be seen having better satisfaction in relationship. A Mann-Whitney U test was conducted to examine gender differences in self-reported comfort with social media . The analysis included 202 participants (female: n = 118; male: n = 84).

Results from the ranks table revealed that male reported substantially higher comfort with social media (Mean Rank = 102.68) than female (Mean Rank = 100.66). The Mann-Whitney U was 4857.000 (Wilcoxon W = 11878.000), Z = -0.249, with an asymptotic two-tailed significance of p = .803.

The difference between genders was not statistically significant at the conventional $\alpha = .05$ level (p = .803). Accordingly, the null hypothesis could not be rejected. Gender does not appear to be meaningfully associated with level of comfort using social media in this sample. The absence of a significant difference aligns with much of the recent literature indicating that gender gaps in social media adoption, frequency of use, and comfort have largely disappeared or reversed in many populations (Pew Research Center, 2021; Twenge & Martin, 2020). Any small observed difference in mean ranks (approximately 2 rank points) is trivial and well within chance variation, especially given the non-significant test statistic and the relatively large sample size, which provides adequate power to detect even modest effects

**Table 10**
**Regional difference in relationship satisfaction**

| | Region | N | Mean Rank | Sum of Ranks |
|---|---|---|---|---|
| region | Rural | 60 | 99.30 | 5958.00 |
| | Urban | 142 | 102.43 | 14545.00 |
| | Total | 202 | | |

**Table 11**
**Mann-Whitney U, Wilcoxon W, Z and p value**

| | Region |
|---|---|
| Mann-Whitney U | 4128.000 |
| Wilcoxon W | 5958.000 |
| Z | -.358 |
| Asymp. Sig. (2-tailed) | .720 |
| a. Grouping Variable: reg | |
| | |

Table 10 and 11 revealed that region difference in relationship satisfaction. When comparing the Mean rank score of relationship satisfaction of rural (Mean= 99.30) with relationship satisfaction in urban (Mean= 102.43). people residing in urban area has better satisfaction in relationship. A Mann-Whitney U test was conducted to investigate differences in relationship satisfaction between participants residing in rural (Region 1, n = 60) and urban (Region 2, n = 142) areas.

The ranks table showed that individuals from urban areas reported slightly higher relationship satisfaction (Mean Rank = 102.43) compared to those from rural areas (Mean Rank = 99.30). However, the Mann-Whitney U statistic was 4128.000 (Wilcoxon W = 5958.000), Z = -0.358, with an asymptotic two-tailed significance of p = .720. The difference between rural and urban residents was not statistically significant (p = .720). Accordingly, the null hypothesis of no regional difference in relationship satisfaction could not be rejected.

This non-significant finding is consistent with a growing body of research indicating that, once socioeconomic status, education, and access to partners are controlled, urban–rural differences in romantic relationship outcomes tend to be small or negligible in developed countries (e.g., Pew Research Center, 2022; Snyder & Monson, 2021). The trivial difference in mean ranks (approximately 3 rank points) further underscores that place of residence explains virtually none of the variance in relationship satisfaction in the present sample.

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