Analysis of Factors Influencing Kudos in BTS Fanfiction: A Regression Study

Introduction:

Fanfiction has emerged as a popular form of creative expression within online communities, with platforms like ArchiveofOurOwn (AO3) providing a space for fans to share their stories. One crucial metric used to measure the reception of fanfiction is "kudos," representing reader appreciation. In this report, we analyze the factors influencing kudos in BTS fanfiction using regression analysis.

Variable Selection and Data Preprocessing:

We selected three key independent variables for analysis: masculine_power_score, representing gender dynamics in fanfiction; published_year, indicating the temporal aspect of fanfiction; and words, reflecting the length of the story. These variables were chosen based on their potential impact on reader engagement and kudos. Additionally, lexical richness was calculated to gauge the complexity of language used in the stories.

Regression Analysis:

The multiple linear regression model was employed to assess the relationship between the independent variables and kudos. Our analysis revealed several key findings:

1. Published Year: The published year of the fanfiction was found to have a statistically significant negative impact on kudos. More recent stories tend to receive fewer kudos, suggesting a potential shift in reader preferences or saturation of the market over time.

2. Masculine Power Score: Contrary to expectations, the masculine power score was not found to have a significant impact on kudos. This indicates that gender dynamics in fanfiction may not strongly influence reader appreciation, at least within

the context of BTS fanfiction.

3. Words: The number of words in the story was not found to be statistically significant in predicting kudos. This suggests that story length may not be a critical factor affecting reader engagement and appreciation.

Residual Analysis:

The residuals of the regression model were examined for normality and homoscedasticity. The Shapiro-Wilk test indicated that the assumption of normality was met, suggesting that the residuals are normally distributed. Additionally, the residuals plotted against predicted values did not exhibit any discernible pattern, indicating homoscedasticity.

Multicollinearity Testing:

Variance inflation factor (VIF) values were calculated to assess multicollinearity among the independent variables. The results indicated low multicollinearity, suggesting that the independent variables were not highly correlated with each other.

Conclusion and Future Directions:

In conclusion, our analysis provides insights into the factors influencing kudos in BTS fanfiction. While the published year was found to significantly impact kudos, gender dynamics and story length showed no significant effects. These findings contribute to our understanding of reader engagement in fanfiction communities.

Future research could explore additional variables, such as genre or author characteristics, to further elucidate the factors driving reader appreciation. Additionally, expanding the analysis to include fanfiction from different fandoms could provide a more comprehensive understanding of reader preferences and engagement patterns.

Overall, this study underscores the complex interplay of factors shaping reader

engagement in online fanfiction communities, highlighting the dynamic nature of fan-created content and its reception.