6. Conclusions

6.1. Results explained

The null hypothesis (H₀) suggests that there is no difference in the proportion of video game sales across different regions based on the platform. The alternative hypothesis (H₁) proposes that there is a significant difference in these proportions. Given the p-value of 6.238272 × 10⁻⁶², which is extremely small, we reject the null hypothesis. This indicates strong evidence that there is a significant difference in the proportions of video game sales across the regions according to the platform.

6.2. Interpretation of the results

The results show distinct regional platform dominance: in North America, the Xbox 360 (X360) leads, likely due to its strong online services and gaming ecosystem. In Europe, the PlayStation 3 (PS3) is dominant, possibly due to its broad appeal and exclusive content. In Japan, the Nintendo DS (DS) prevails, reflecting local preferences for portable gaming and Nintendo’s strong presence. In other regions, the PlayStation 2 (PS2) remains the top platform, benefiting from its global popularity and extensive game library.

6.3. Reasons and/or implications for future work, limitations of your study

The VGSales dataset has several limitations, including the lack of sales data over time, which hinders analysis of sales trends and growth patterns. It also lacks detailed information on digital sales, which are increasingly important in modern gaming. Additionally, the dataset doesn't account for regional pricing differences or marketing efforts, limiting insights into factors influencing sales. Moreover, the absence of consumer demographic data makes it difficult to analyze the relationship between platform sales and consumer behavior comprehensively.