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**Journal of
Mathematical
Structures and
Statistical Patterns**



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Preface

We are pleased to present the inaugural issue of *Symmetry & Sigma: Journal of Mathematical Structures and Statistical Patterns*, Volume 1, Issue 1 (2024). This journal aims to be a leading platform for disseminating innovative research at the intersection of mathematics and statistics, with a focus on their application to real-world problems. The articles featured in this issue exemplify the diverse ways in which statistical and mathematical methodologies can be employed to gain insights into various societal challenges.

Our first article by Febby Yuliana Sari, titled “Multiple Linear Regression Analysis on the Human Development Index (HDI) in Lampung Province, Indonesia,” explores the significant impact of education and unemployment on HDI. Using multiple linear regression analysis, Sari's research provides valuable findings on how increasing the average length of schooling can substantially enhance the quality of life in Lampung Province.

In “Fast Food Consumption’s Correlation with Teen Obesity in Lampung’s Negeri Katon Village, Indonesia,” Cici Tria Fatmala and Rahmawati Azizah investigate the alarming rise in adolescent obesity linked to fast food consumption. Employing contingency table analysis, their study highlights a statistically significant correlation between these dietary habits and obesity, underscoring the need for public health interventions.

Eva Kurnia Sari’s study, “Contingency Table Analysis in Stunting Cases in Lampung, Indonesia,” examines the relationship between demographic factors and stunting prevalence. Despite rigorous analysis, the research finds no significant association, suggesting that other factors may play a more critical role in stunting, thereby prompting further investigation into this pressing issue.

Rohmatun Nikmah and Reni Permata Sari contribute to the discourse on technology’s impact on youth with their paper, “The Relationship of Gadget Use and Social-Emotional Development in South Lampung, Indonesia.” Their findings reveal a significant correlation between excessive gadget use and adverse social-emotional outcomes among preschool children, emphasizing the need for balanced technology exposure.

The study “Chi-Square Examines Lampung’s Covid-19 Prevention Behavior Connection to Knowledge Levels” by Kurnia Sari and Ma’rufah Hayati provides important insights into the role of education in combating the COVID-19 pandemic. Through a detailed Chi-Square analysis, they demonstrate a significant link between knowledge levels and preventive behaviors, highlighting areas where public health education can be improved.

Finally, the article “Dengue Modeling Using Multiple Regression in Bandar Lampung Province, Indonesia” by Ana Risqa JL, Arini Alhaq, and Nurhayatin Nissa uses multiple regression analysis to explore the factors influencing the spread of Dengue Hemorrhagic Fever. Their research offers crucial information for designing targeted interventions to control and prevent dengue outbreaks in densely populated areas.

We extend our deepest gratitude to the authors for their contributions and to the reviewers for their diligent work in ensuring the quality of this publication. We hope that this issue stimulates further research and discussion in these vital areas and serves as a valuable resource for academics, practitioners, and policymakers alike.

Sincerely,

Ma’rufah Hayati

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