

OBESITY LEVELS DURING COVID-19 BASED ON EATING HABITS AND PHYSICAL CONDITION DASHBOARD

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ABSTRACT - According to this study, Body mass Index (BMI) status increased with rising prevalence of overweight during the COVID-19 pandemic. Furthermore, the only thing that significantly altered BMI status throughout this pandemic was following a suitable eating plan. As a result, by utilizing Power Bi as a data visualization platform, the data acquired from Kaggle can be simply viewed. As a result, one of them is producing this data visualization to open the eyes of the responsible body to be more sensitive to obesity. In addition to data visualization, data visualization aids in drawing conclusions and seeing viewpoints fast.

Keywords: Body Mass Index (BMI)

1. INTRODUCTION

This study explores the correlation between overweight prevalence, BMI, and the COVID-19 pandemic. It finds that increased BMI prevalence is linked to more cases of overweight. The study emphasizes the importance of adopting an optimal dietary plan as the primary factor influencing BMI during the pandemic. It focuses on eating habits and physical condition, identifying five key components. Data visualization techniques, such as bar charts and pie charts, are used for analysis. The study highlights the rise in obesity rates during the pandemic and its association with increased risk of diseases. It aims to improve accessibility and understanding of obesity statistics through data visualization. The findings underscore the significance of healthy eating habits and physical activity for a healthy lifestyle.

2. METHODOLOGY

To streamline the project development, a Power BI dashboard construction approach is chosen, comprising five phases: basic research, analysis, design, development, and testing. The research phase involves evaluating the project concept and defining objectives, scope, and importance. In the analysis phase, a comprehensive assessment of the collected dataset and hardware/software requirements is conducted. The development phase includes the Extract, Transform, and Load (ETL) process to create effective data visualization solutions. The project undergoes thorough testing through a User Acceptance Test with 34 participants to ensure system performance and usability.

3. RESULTS AND DISCUSSION

The User Acceptance Test collected personal information from 34 respondents, including their gender, age, and employment status. The questionnaire used a scale from 1 (strongly disagree) to 5 (strongly approve) to assess user experience. The test covered criteria such as perceived ease of use, perceived utility, attitude, and intention to use. Results showed that over 35.3% of respondents found the dashboard easy to use, while 2.9% had difficulty with data visualization. Additionally, 44.1% of respondents selected the dashboard, indicating its popularity among users seeking political information. Based on the study's findings, the user acceptance test yielded positive results with an overall score exceeding 3.0. The cumulative mean for four sections, namely perceived ease of use (PEU), perceived usefulness (PU), attitude (ATT), and intention to use (IU), were 3.84, 3.74, 3.72, and 3.86, respectively, resulting in a total average of 3.81. These scores indicate a favorable perception of the system's ease of use, usefulness, positive attitude, and intention to use among the participant.

4. NOVELTY OF RESEARCH / PRODUCT

This text discusses a study aimed at understanding and addressing the issues and causes of obesity. The study focuses on monitoring and analyzing food consumption practices and individual physical conditions. The researchers propose a new strategy using data visualization to analyze obesity during the COVID-19 pandemic's quarantine control phase. They employ analytical methodologies and data cleaning techniques to obtain better data quality. The study involves preliminary research, analysis, design, development, and testing to create an interactive design dashboard that provides obesity information to educate society and assist individuals in making healthier decisions. The study emphasizes the importance of comprehensive obesity index data analysis, data visualization, user-centered design, and detailed analysis to raise awareness, facilitate informed decision-making, and enhance public understanding of obesity. The goal is to contribute to creating a healthier and happier society by addressing the increasing prevalence of obesity.

5. CONCLUSION

This project aims to examine and address issues related to Obesity Levels During COVID-19 based on eating habits and physical condition. A data visualization dashboard is created to educate the public about the consequences of being overweight. The project follows a development process model consisting of planning, analysis, development, and testing phases. User acceptability testing is conducted to identify and address concerns. The findings of this study will prompt a reevaluation of resource allocation to health organizations, both public and private. The government's role in preventing obesity and promoting healthy lifestyle choices is emphasized. Public education and visualization are crucial for understanding the implications and causes of obesity. This project highlights the importance of early exposure and data interpretation for the well-being of the public.

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