Chosen Theme: Summer Olympics

How does the number of athletes a country sends relate to its medal count?

This project investigates the relationship between the number of athletes sent by a country to the Summer Olympics and its respective medal count. We aim to determine whether a larger contingent of athletes results in a higher medal tally and examine how this pattern varies with a country's size. Additionally, we will explore performance efficiency by calculating the athlete-to-medal ratio to identify if some nations achieve more with fewer participants.

Does diversity in sports participation impact a country's medal tally?

This study examines the effect of sports diversity on a country's overall medal count. We will analyze whether participation across a wide range of disciplines leads to greater success or if specialization in select sports proves more advantageous. By identifying patterns, our aim is to determine if countries with broader participation strategies have an Olympic advantage. Our analysis will focus on trends over time and compare strategies employed by leading medal-winning nations.

How does athlete performance vary with age and experience in different Olympic sports?

This research explores the relationship between age, years of competitive experience, and performance across various Olympic sports. We will investigate whether age and experience offer advantages in specific events—for instance, endurance sports benefiting experienced athletes or explosive sports favoring

younger competitors. The study will also identify trends in sports that exhibit peak performance at certain ages, offering valuable insights for talent development and program planning.

Dataset Selections:

1. **Historical Olympic Medal Data**:

    - Olympic Medal Winners Data | Spreadsheet Download - Gigasheet

2. **Athlete Participation and Demographics Data**:

    - 120 years of Olympic history: athletes and results - Kaggle

3. **Event-Level Performance Data**:

    - Olympic Historical Dataset From Olympedia.org - Kaggle

4. **Country-Specific Sports Participation Data**:

    - Olympic Games medal Dataset (from 1896 to 2018) - GitHub

5. **Athlete Injury and Career Longevity Data**:

    - Olympic history: longitudinal data scraped from www.sports-reference.com - figshare

6. **Olympic Rules and Event Data**:

    - Olympic Games Data Analysis - GitHub

7. **Historical Country Rankings in Sports**:

    - All-time Olympic Games medal table - Wikipedia

8. **Olympic Hosting Impact Data**:

    - Olympics Through the Years: A Historical Data Dashboard - SpreadsheetWeb

9. **Sports Infrastructure Investment Data**:

    - Olympic Games Data Analysis Project - Fueler

10. **Athlete Events and NOC Regions Data**:

- Olympics Data Analysis WebApp - GitHub

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Github Page:

https://github.com/ogokefe/ie421-2024-2025-termproject-accept-all-cookies--new-