**Feedback Memo on “Impact of School Funding Cuts on 8th Grade Math Scores (2000–2020)” by Team Lemur**

**Summary of the Report**

This project aims to address that the reductions in inflation-adjusted per-student expenditure have a negative impact on student outcomes. In order to address this problem, they seek to answer the question whether reductions in inflation-adjusted per-student funding correlate with stagnant or declining 8th-grade math scores in Arizona, Florida, Hawaii, and Indiana from 2000 to 2020. Using data from National Center for Education Statistics and the Nation’s Report Card, the authors set out to answer this question by tracking and comparing the trend of inflation-adjusted per-student expenditure and the 8th-grade math scores. They find that the partial correlation between inflation-adjusted per-student expenditure and the 8th-grade math scores is offset and negatively correlated. They interpret this as evidence that the answer to their question is that inflation-adjusted per-student expenditure and the 8th-grade math scores is delayed but adverse. Given that, they argue that the reductions in inflation-adjusted per-student expenditure have a negative impact on student achievement.

**High-Level Reflections**

**Document Organization**

The state selection reasoning is very strong. The state-by-state layout is easy to follow. The section on “Reasons for Public School Defunding” adds useful context. However, the “complex patterns” are sometimes confusing to the audience without context, especially in the executive summary.

**Problem and Question**

The motivating problem is stated clearly enough to frame the report. Using inflation-adjusted per-student expenditure and the 8th-grade math scores can be effectively answering the motivating problem. If more background, limitation, and impacts can be articulated, the report can be more thought-provoking and inspiring.

**Analysis Approach**

A descriptive comparison of funding trends against math score changes is a logical starting point. Adding a brief note on confounding variables—such as policy interventions or demographic shifts—could address any concerns about attributing score changes solely to funding. If difference-in-difference can be used to compare states with other control states, the conclusion can be more emphasized.

**Answers**

Arizona and Indiana’s data strongly suggest that sustained budget cuts eventually coincide with weaker math performance. Florida and Hawaii appear more complex, implying that other factors may delay or mitigate negative outcomes. The conclusion that stable, well-directed funding is crucial for long-term achievement is consistent with the presented evidence.

**Detailed Suggestions**

* Overlaying funding and score timelines for each state might clarify exactly where and when these metrics diverge.
* The lagged impact of budget cuts on scores is an important insight—consider a short explanation of why score declines might take time to appear (e.g., reduced resources in classrooms, teacher turnover).
* Suggest linking these findings to specific policy recommendations to show how sustained funding can be applied effectively.

**Constructive Praise**

The inclusion of political and economic drivers of school budget cuts provides valuable context. Organizing the discussion by state gives each case a clear storyline, and the final call for strategic, continuous investment aligns well with the trends observed in the data. By strengthening the clarity of the question up front, visually tying the funding data to math performance, and suggesting tangible policy moves, this report would better guide stakeholders in addressing the ramifications of reduced school budgets on 8th-grade math scores.

**Feedback Memo on “UDS Team Pandas: Exploratory Report” by Team Pandas**

**Summary of the Report**

This project aims to address the rising concerns about younger adults (under 50) developing cardiovascular disease (CVD). In order to address this problem, they seek to answer the questions about prevalent bad habits or lifestyle choices associated with cardiovascular disease patients, what the distribution of different types of cardiovascular disease and their relationship to demographics are, and when younger patients with cardiovascular disease began to show a noticeable increase in prevalence. Using publicly available dataset from Kaggle, the authors set out to answer this question using statistical correlations. They find only weak correlations between key risk factors and CVD. That result contrasts with existing literature, which typically reports stronger associations with smoking, blood pressure, and blood glucose. The authors also highlight that older individuals remain at higher risk overall, but observe minimal gender-based differences in this dataset. They interpret this as evidence that the answer to their question is that persistent unhealthy lifestyle habits, obesity, physical inactivity, and diabetes, all have the potential to drastically increase the rate of CVD in this generation of young adults. Given that, they argue unhealthy lifestyle habits rise the concerns about younger adults developing CVD.

**High-Level Reflections**

**Document Organization**

The report has a logical flow, moving from a concise Executive Summary to the introduction of the data, risk factors, demographics, and concluding remarks. Adding clear section headings (e.g., “Lifestyle Choices” vs. “Demographic Insights”) helps readers track each piece of the analysis.

**Problem Statement**

They make a solid case that younger adults may face a growing burden of CVD, and that public health efforts need to focus on prevention in this demographic. Because they are addressing stakeholders (e.g., CDC, NIH), emphasizing broader cost or policy implications (beyond the single dataset) could further strengthen the motivation.

**Research Question Alignment**

The main question is whether certain risk factors and lifestyle choices strongly predict CVD in younger adults. This question fits well with the data used, though the authors acknowledge that some variables (e.g., race, socioeconomic status) are incomplete or gleaned from separate studies.

**Analysis and Answers**

The descriptive and correlational approach is a decent first pass at understanding how age, BMI, cholesterol, and other factors link to CVD. However, the authors note a discrepancy between the data’s weak correlations and established research. They suggest obtaining more robust datasets (like ResearchAllOfUs) to clarify whether these observed patterns are truly representative or simply limited by the Kaggle sample.

**Detailed Suggestions**

**Data Quality and Scope**:

* Clarify known limitations (e.g., possible self-report bias, sample representativeness) and how this might explain weaker correlations in the dataset.
* Consider a quick sensitivity analysis or other checks to see if data anomalies are influencing the results.

**Visualizations**:

* The correlation matrix is helpful, but charts overlaying risk-factor distributions for different age groups or depicting changes over time might add clarity.
* If feasible, show a timeline or age-based breakdown highlighting when younger patients (e.g., under 40) began to appear more often in the data.

**Gender vs. Sex Terminology**:

* The switch to “biological sex” in the analysis is a good clarification. Maintaining consistent usage of “male/female” vs. “man/woman” throughout is key for clarity.

**Future Data and Policy Relevance**:

* Emphasize how new data sources or next steps could directly inform interventions (like targeted screening for younger adults).
  + Proposing a small case study or pilot program to test these findings in a clinical setting could show stakeholders practical applications.