Potential Research Topic:

Conducting behavioral experiments to study the factors inhibiting uptake of bicycling in urban centers

Research stream (suggestive): Behavioral sciences, Behavioral economics, Transportation planning with a focus on active mobility

Research Brief:

The purpose of the research may encompass identification of factors inhibiting uptake of bicycling in urban centers in the state of Karnataka with a focus on urban areas and recommend, test, and study the impact of solutions in the realm of behavioral nudges and economics that can increase the usage of cycling as a mode of transport.

The study may analyse factors that influence individuals' choice of using a bicycle and the impact these factors have on the adoption of bicycling for commute or transportation. The categories of data analysis may include collecting data, baselining numbers, and analysing the impact of the factors. Some suggestive internal and external factors are mentioned below:

> *Internal factors*
> 1. *Individuals behavioural biases*
> 2. *Individual aspirations and needs*
> 3. *Individual health and other aspects*
> 4. *Individual perceptions of cycling and mobility in general*
> 5. *Individual choice making framework and other determinants*

> *External factors*
> 1. *Family and peer influences*
> 2. *Societal norms and influences*
> 3. *Socio economic status and its influences*
> 4. *Traffic and infrastructure influences*
> 5. *State of the market and choice of products*
> 6. *Environmental influences (weather)*

Possible Research Outcomes:

1. The research study should focus on gathering reliable data that can be used not only as an outcome for this study but also for the city to use while making infrastructure decisions related to the cycling.
2. The researcher may focus on one or more aspects of the study and also suggest if the study will be conducted in specific spatial pockets of the city. The city chosen for this study can be any city in Karnataka.
3. Based on the analysis and the priority of influences, the research may recommend measures that the government, society, and market may take to mitigate or remove the negative influences which inhibit the adoption of cycling as a mode choice.
4. The research may categorise and prioritise measures that will yield the maximum collective increase in cycling for transportation in the city. Preparing models, conducting scenario analysis and quantification of benefits may be some of the outcomes of this research.
5. Some of the recommended solutions, especially related to behavioural sciences may be tested on a closed group of individuals to document the impact of these solutions.