

# I've Heard This Before: TikTok's Impact on the Re-Popularization of Songs

Breno Matos<sup>1,2</sup> Francisco Galuppo<sup>1,2</sup> Rennan Cordeiro<sup>1,2</sup> Flavio Figueiredo<sup>1</sup>

<sup>1</sup> Universidade Federal de Minas Gerais

<sup>2</sup> Kunumi

{brenomatos, franciscogaluppo, rennancordeiro, flaviovdf}@dcc.ufmg.br

## Introduction

Short video-sharing platforms like TikTok revolutionize music discovery, allowing snippets to go viral. This study investigates how TikTok trends affect the popularity of songs released before the platform's debut. Using data from TokBoard and Google Trends, we evaluate how TikTok may revitalize old songs.

## Research Questions

In particular, we tackle the Research Questions:

- RQ1: Does TikTok influence web search popularity?
- RQ2: Do TikTok trends transfer to broader virality on the web (as captured by Google Searches)?

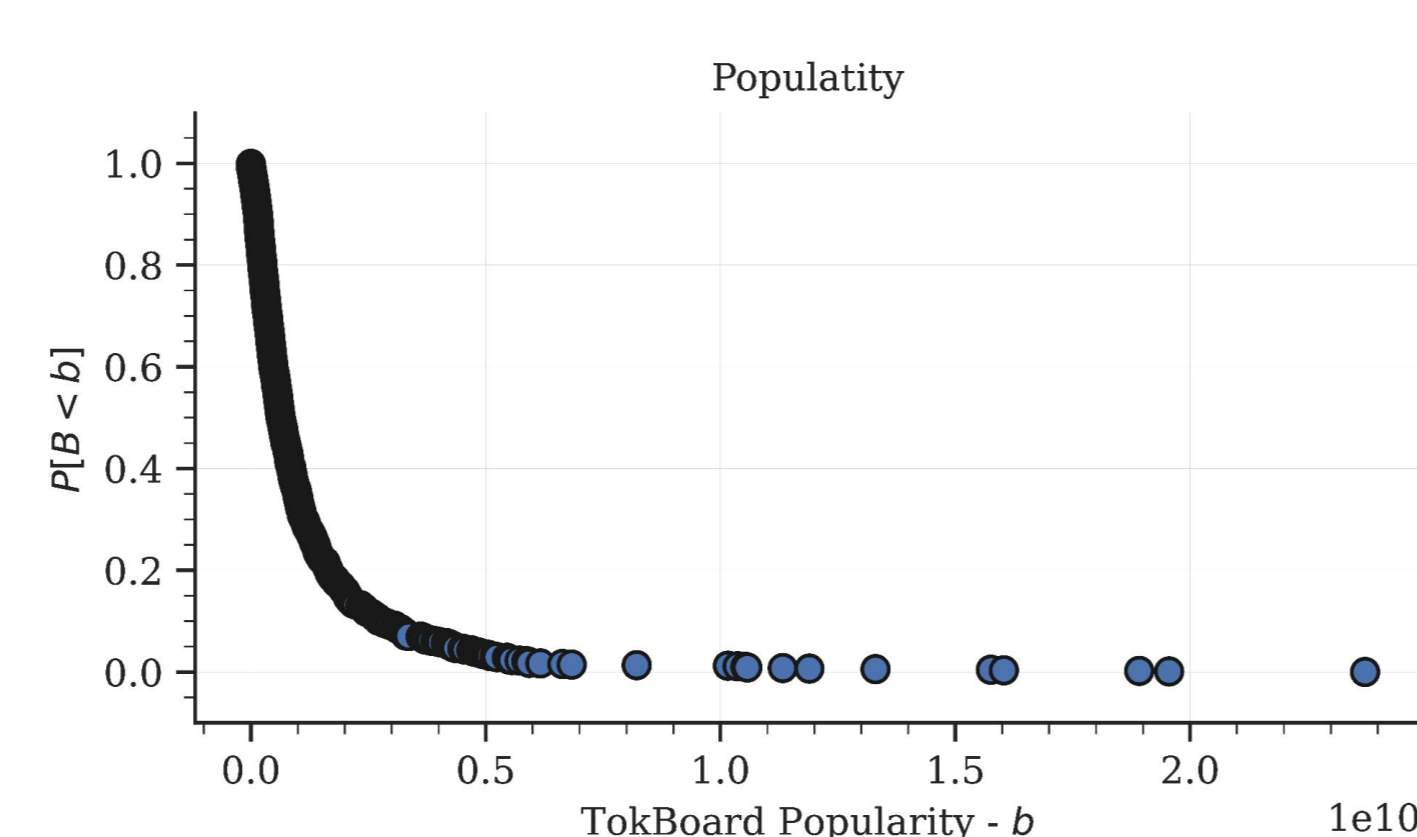
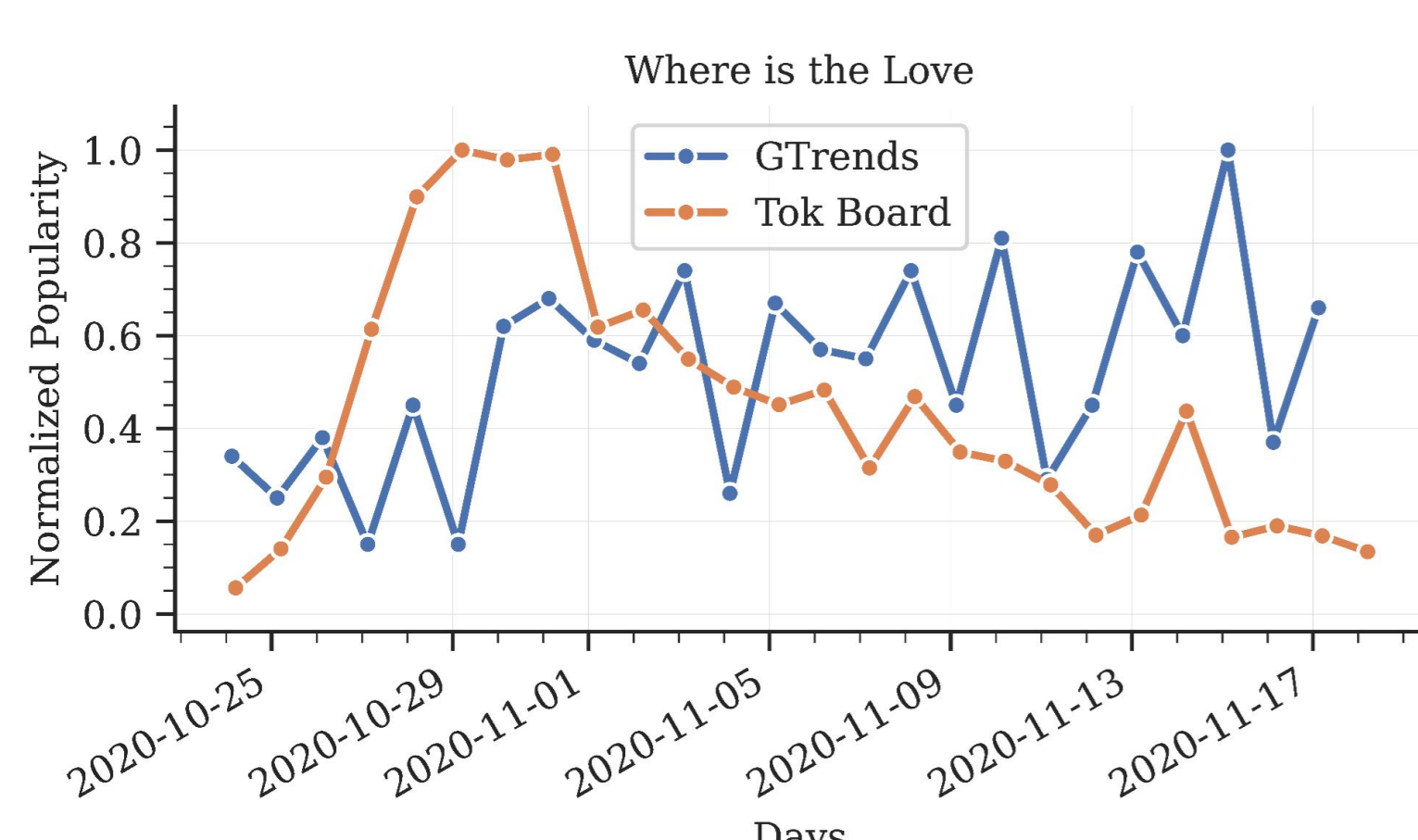
These questions focus on whether TikTok drives web search popularity (via Granger Causality), and whether TikTok and web search virality patterns align (via a Bass Model of Innovation).

Our results provide insights into the mechanisms by which TikTok re-popularizes music.

## Dataset

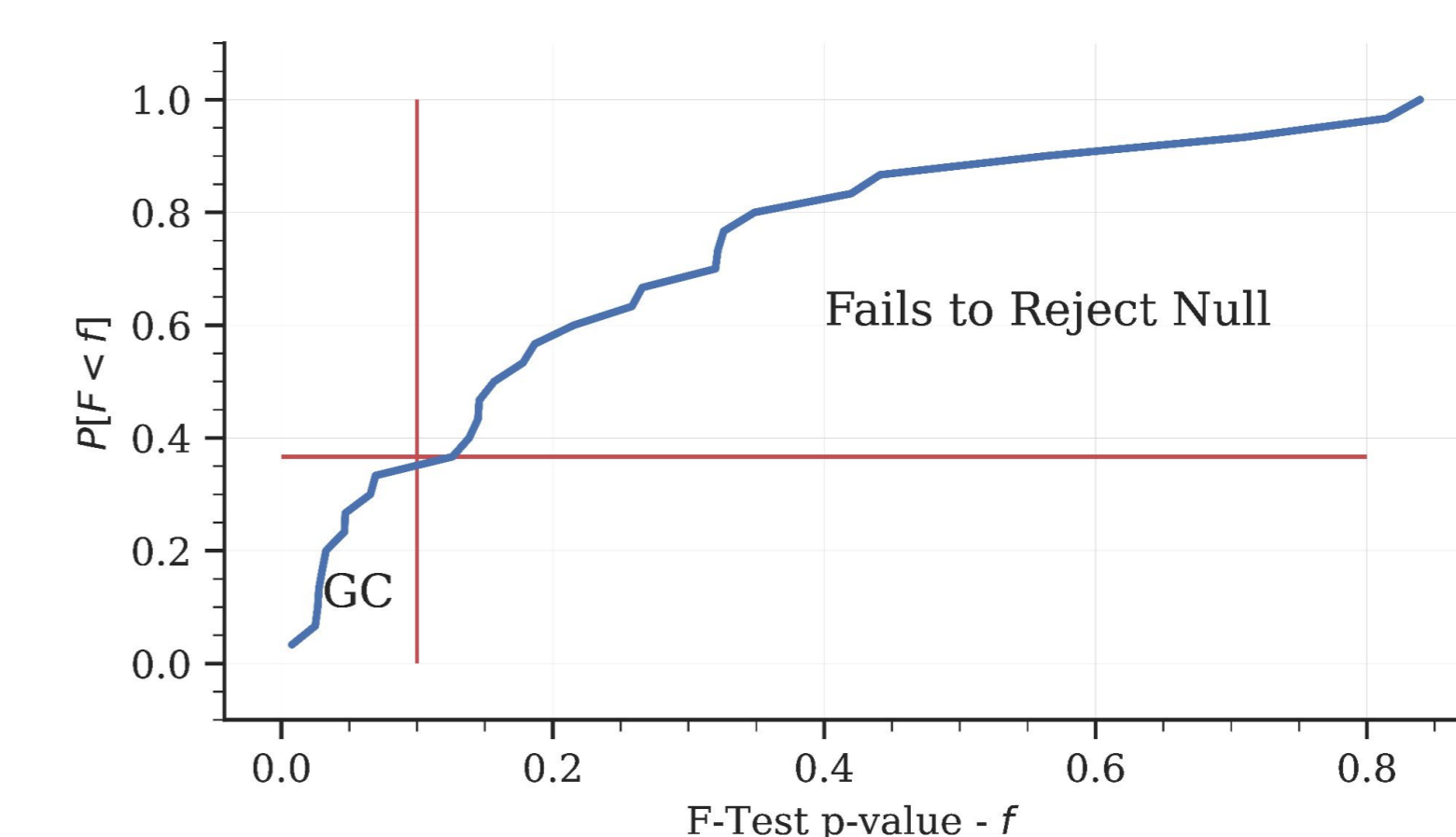
- Source: TokBoard (1,989 songs) and Google Trends.
- Songs released pre-TikTok (pre September 2016).
- Final selection: 30 songs after filtering for accuracy (matches), date (pre TikTok) and data availability.
- We decided to focus on a smaller more accurate (well aligned) dataset.

Data Example and Overall TokBoard Popularity



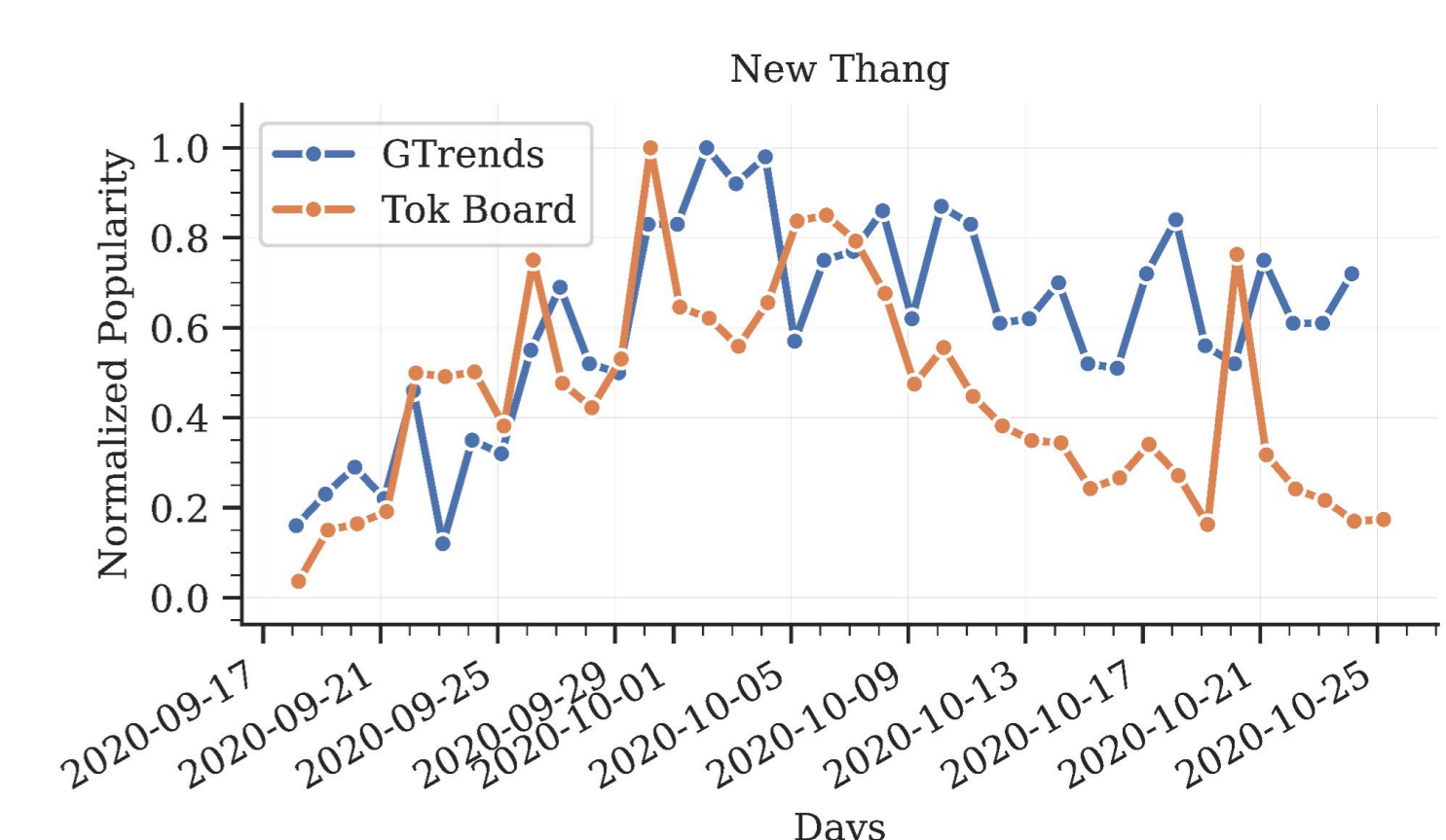
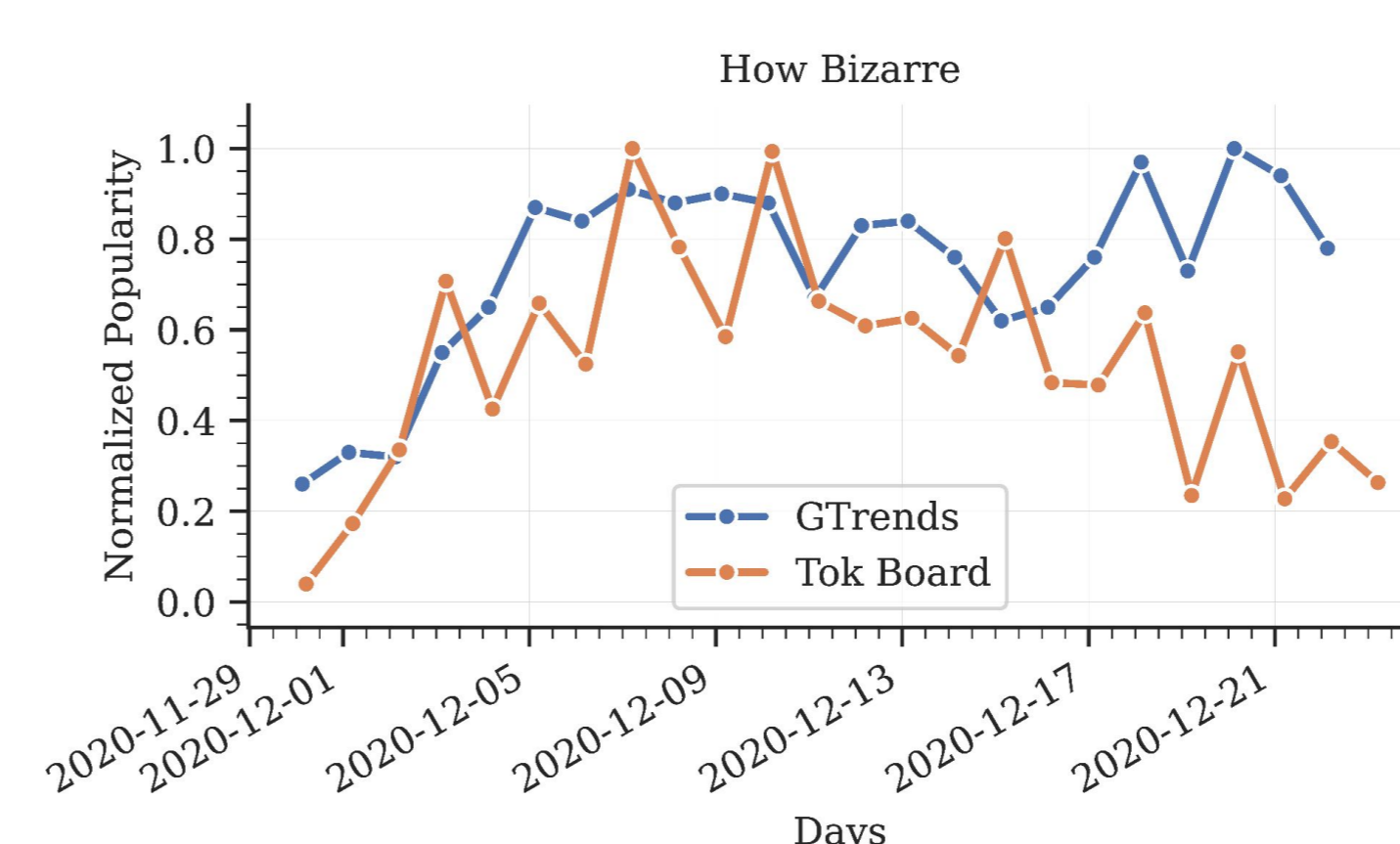
## Results

Granger

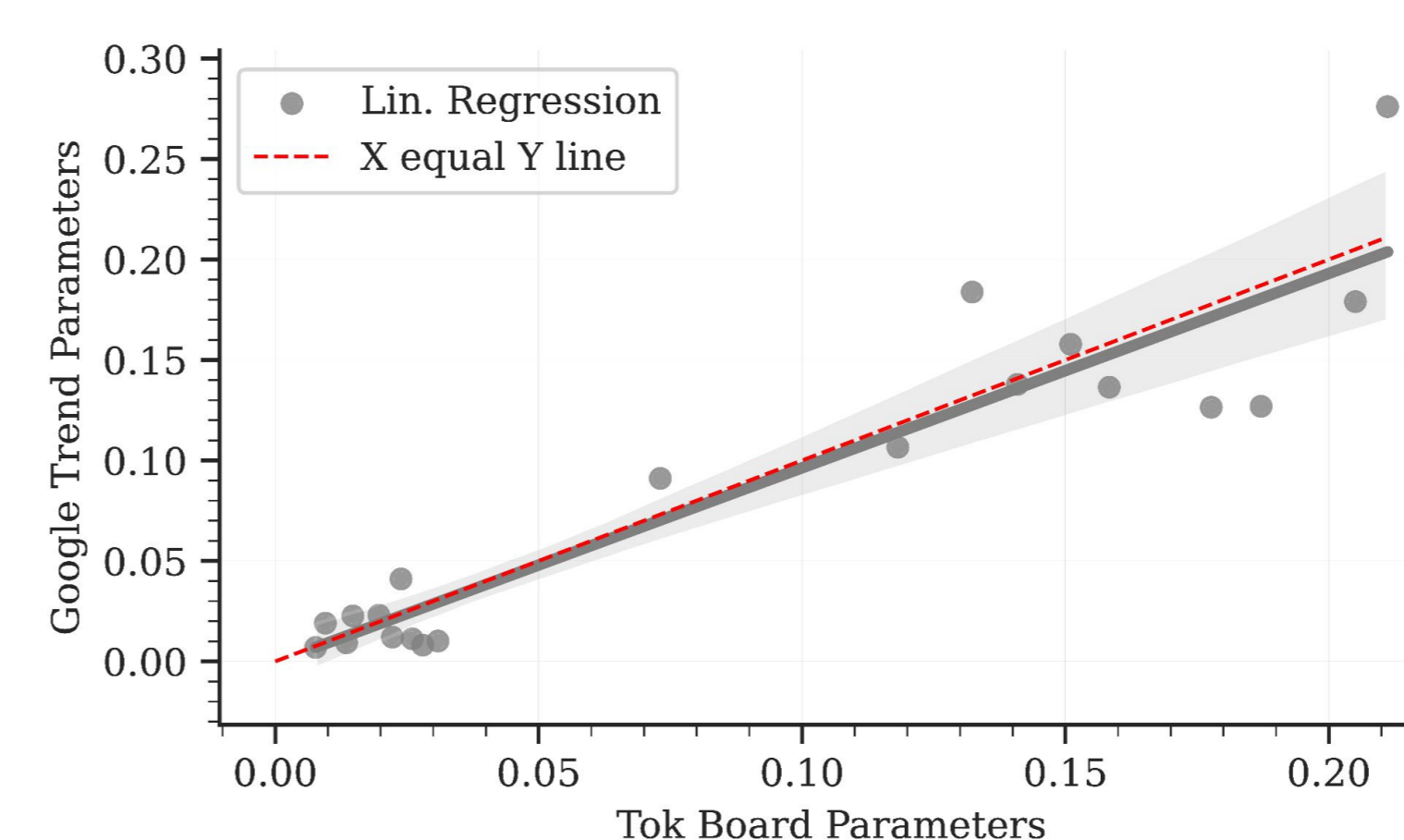


Causality

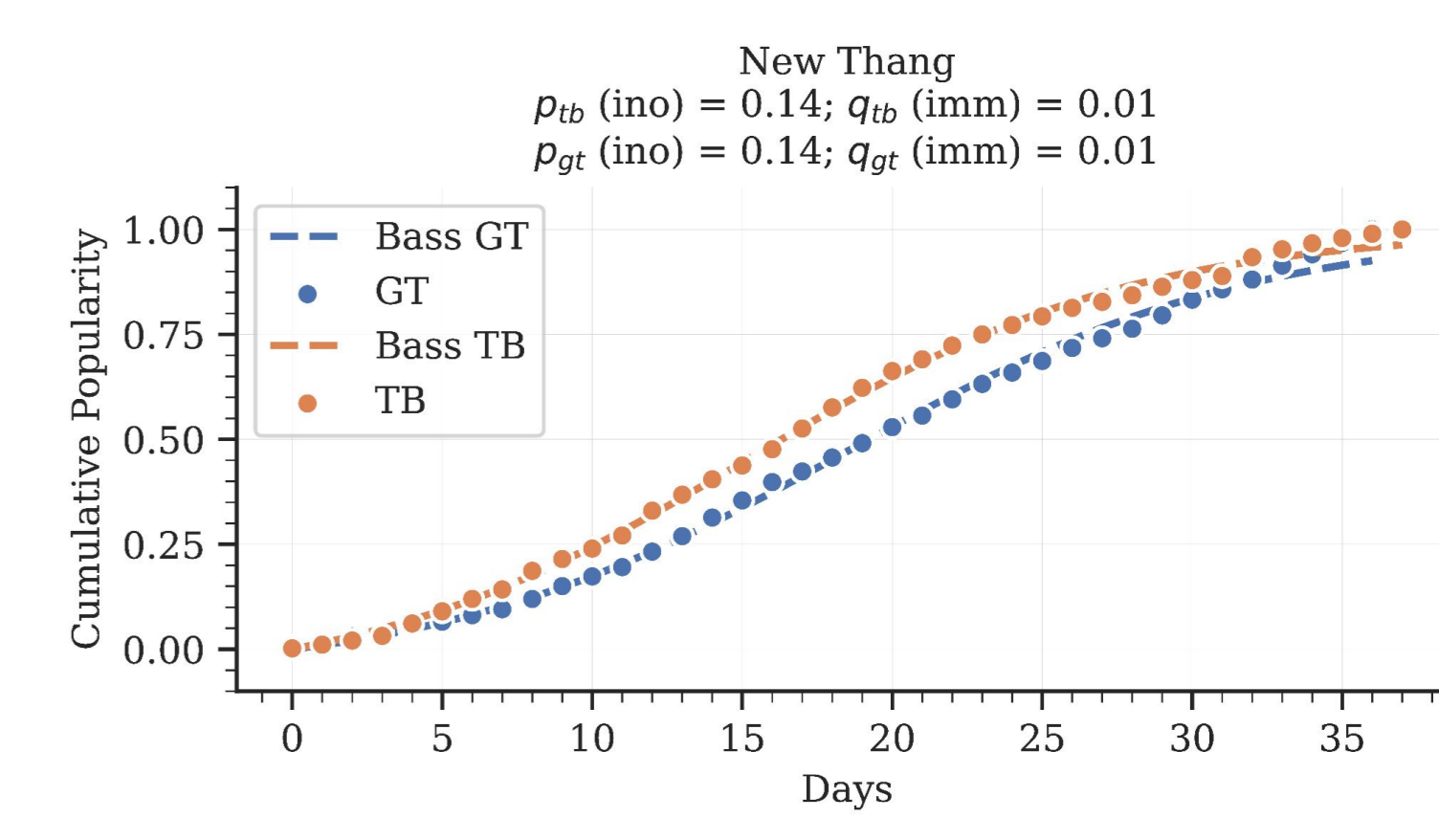
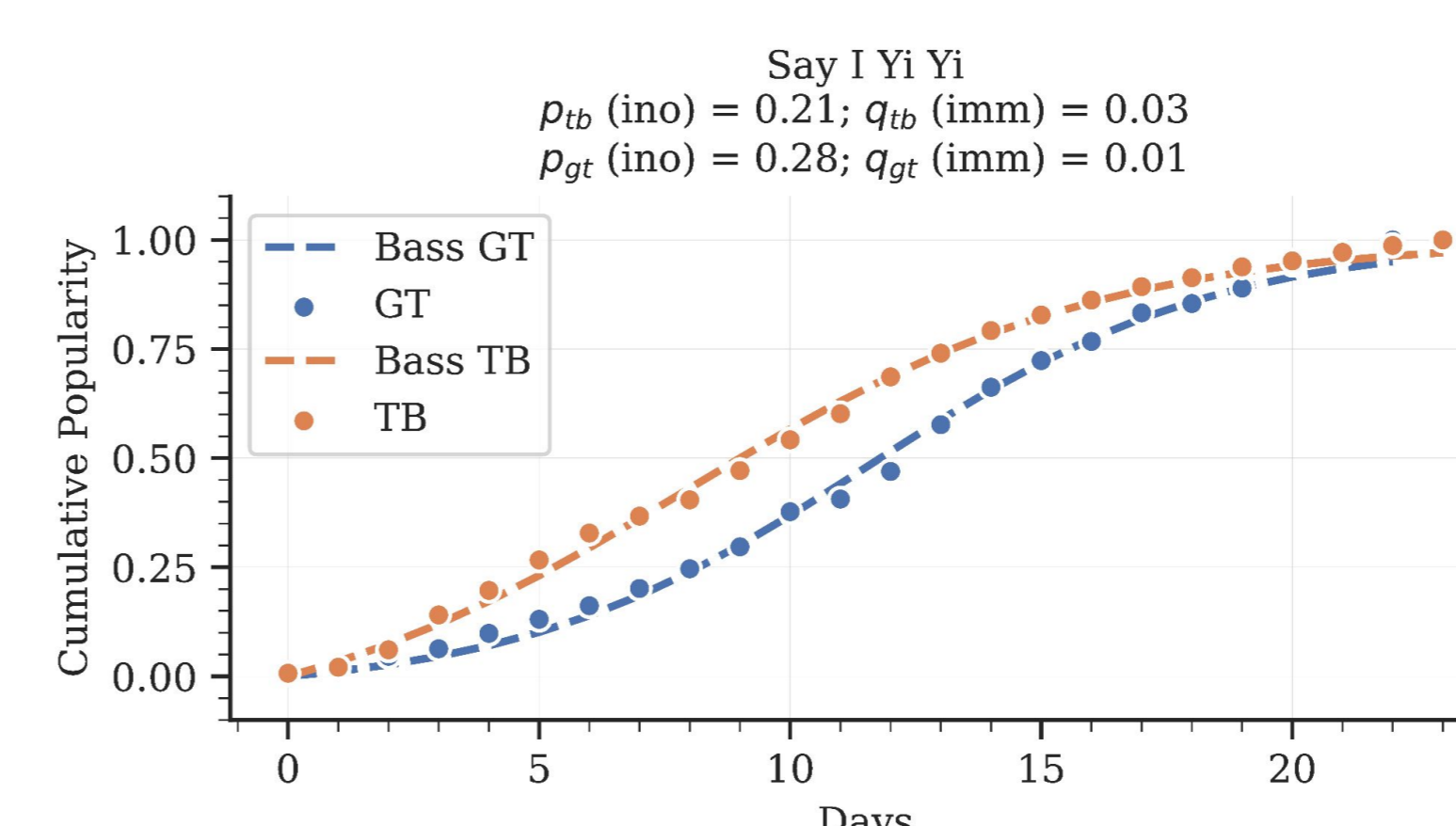
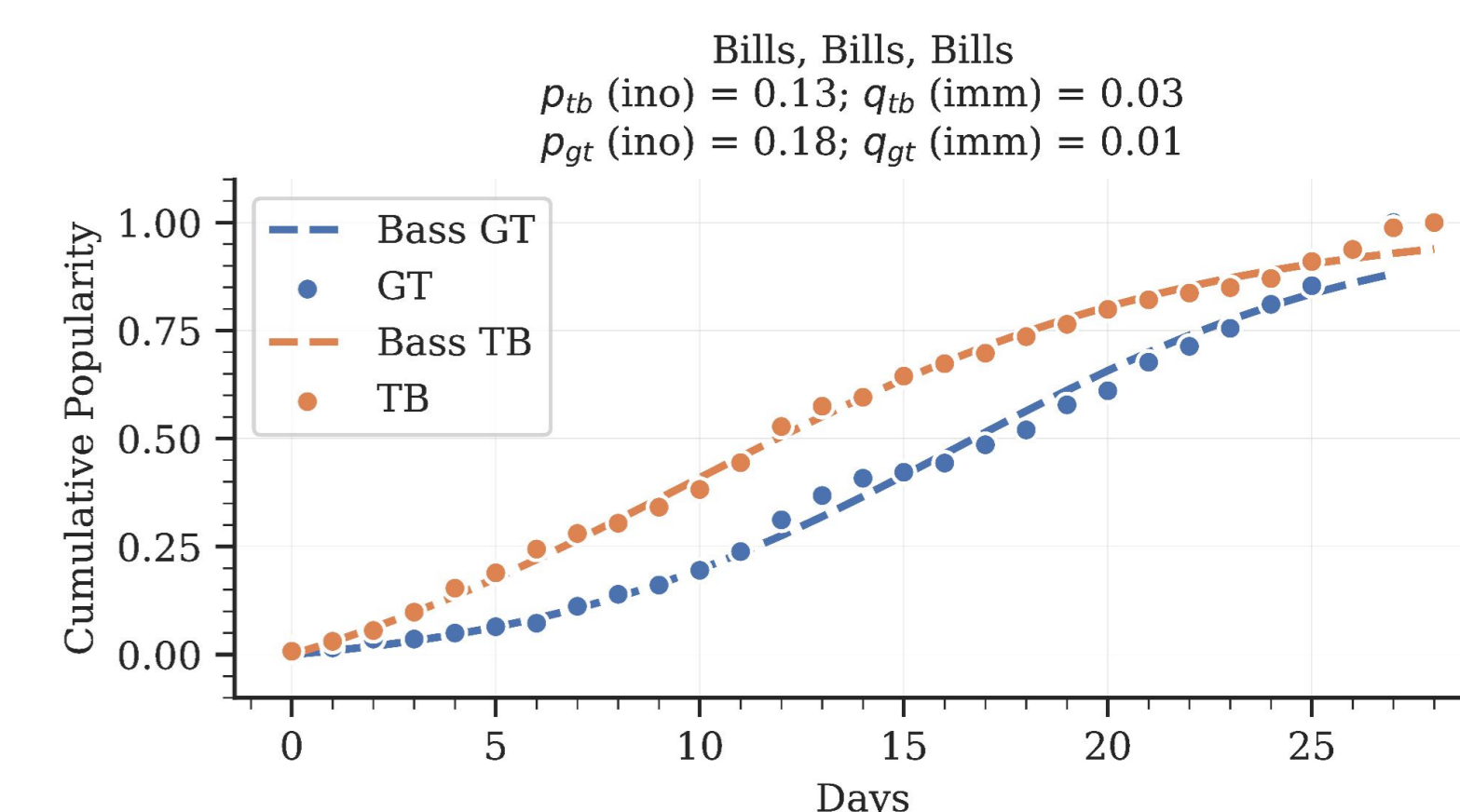
- TikTok trends predict web search popularity for 33% of studied songs ( $\rho$ -value < 0.1). Examples below.



Bass



Model



- Viral dynamics from TikTok transfer to web searches for songs with significant causality.
- Evidence of alignment between TikTok virality and broader adoption trends

Good evidence that TikTok revitalizes older songs by driving virality and search trends. Highlight the platform's role in extending the lifecycle of music.