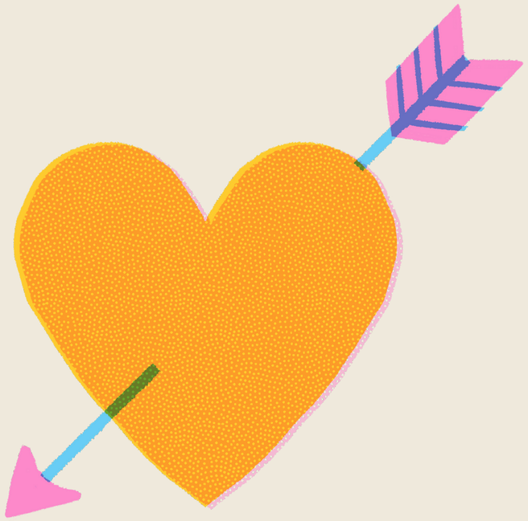

For Better or For Worse: The First Kiss Effect on TV Ratings

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1: Wake Forest University, 2: Vanderbilt University

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Overview

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2. Methods
3. Results
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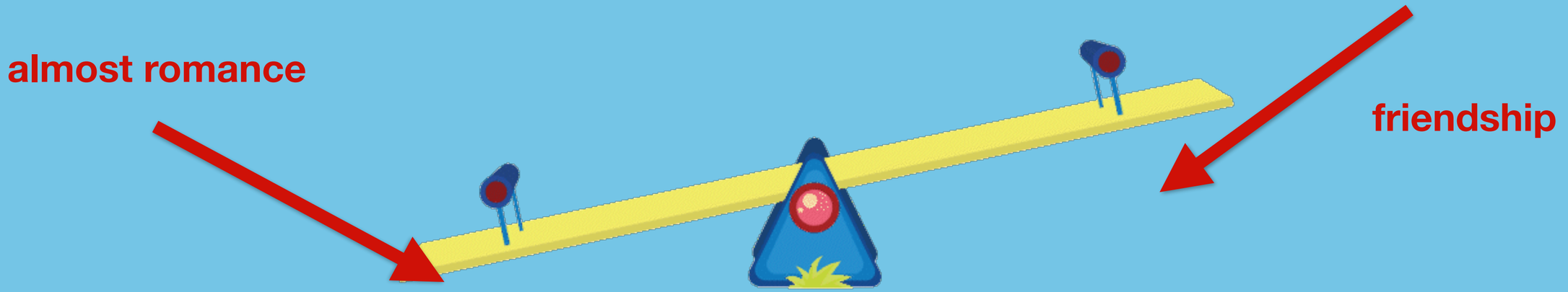
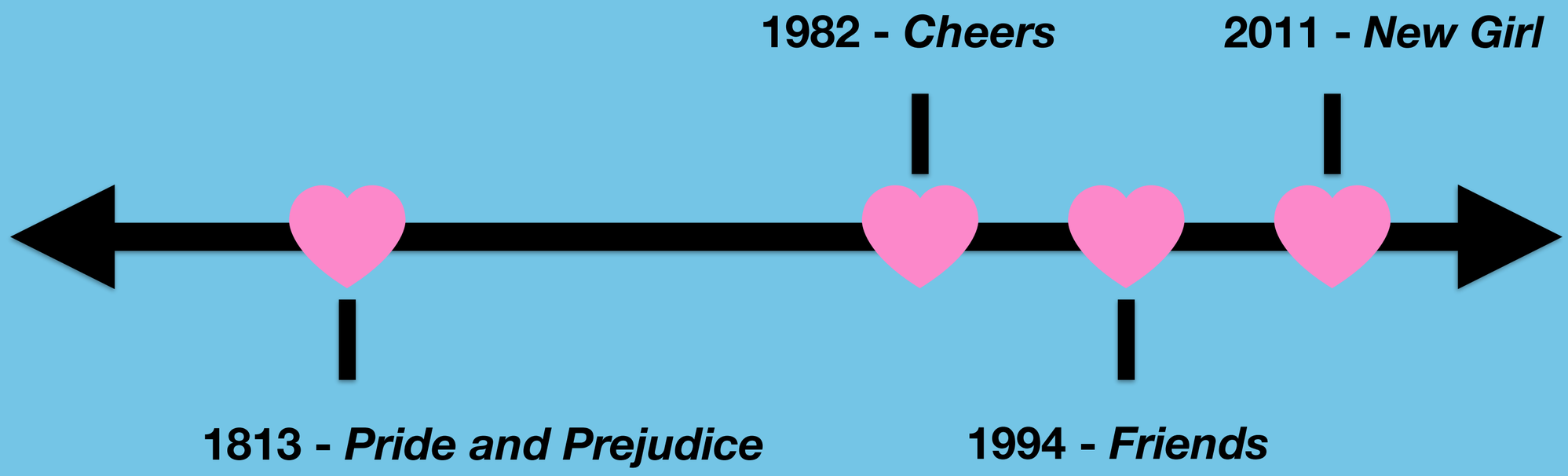
Many television (TV) shows follow the “will they or won’t they” trope, where the dynamic between a pair of characters constantly shifts.



The couple demonstrates romantic chemistry, but their future is plagued by uncertainty and conflict.

→ ???

The concept isn’t exactly new…



To delay or not to delay…

- Some people suspect producers **delay** the couple's first onscreen kiss for a few seasons to **create suspense** and keep viewers engaged.

the **Zeigarnik effect**[1] (viewers get bored and quit watching)

the **"Ashley effect"** (viewers get excited and binge the season)

- The milestone of the first kiss can change the plot trajectory, influence the number of viewers, and impact ratings!

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The Data

- Through publicly available rankings, the **20 most-cited “will they or won’t they” TV couples** were identified.
- Data about couple-show pairings were collected from the **Internet Movie Database (IMDb)** and **Wikipedia**.
- Variables of interest include the **timing** of the first kiss, the couples’ **internet popularity**, **length** of the show, year of **premiere**, and episode **ratings**.

Love (EDA) at First Sight

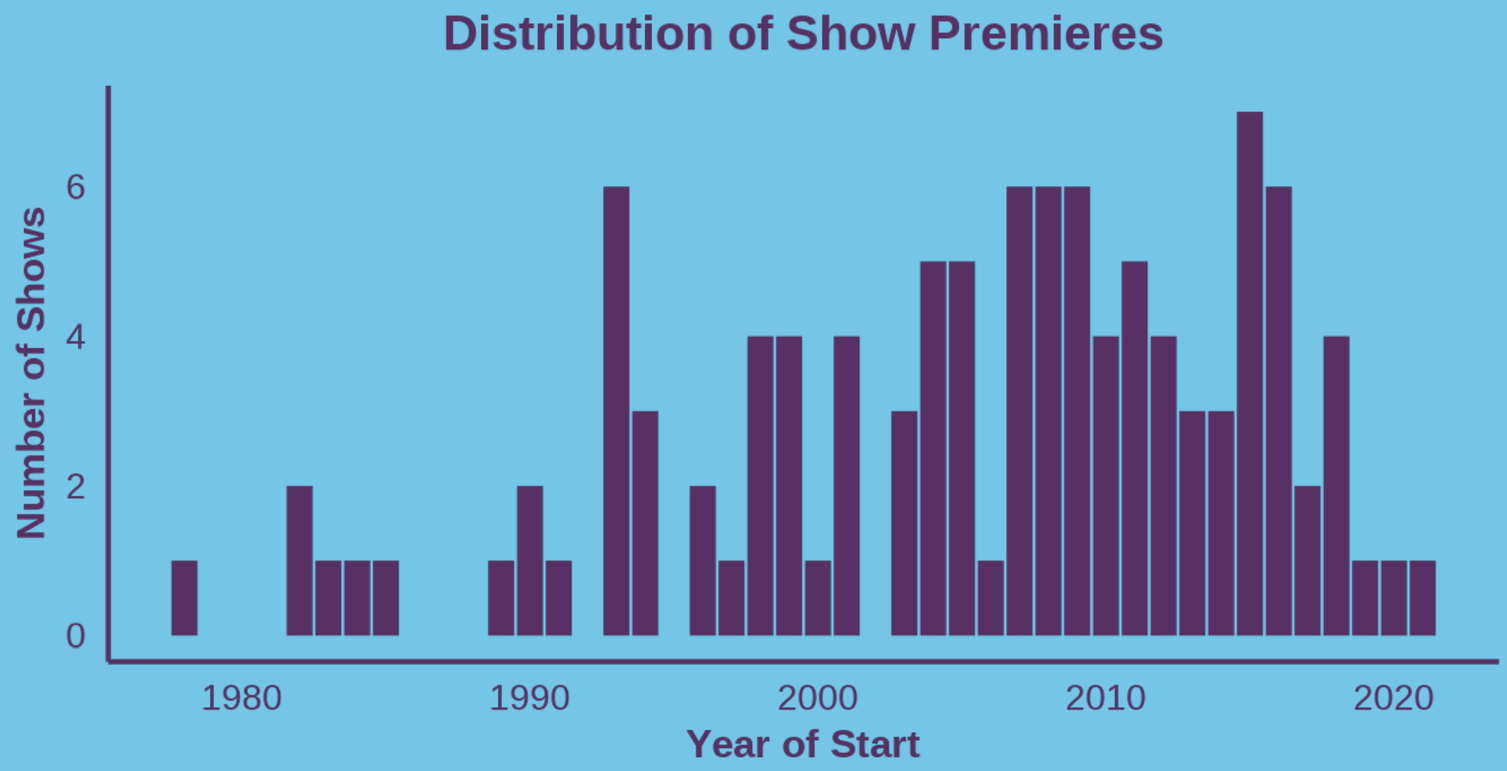

Figure: Couples popular on the internet in 2023 span **over 40 years'** worth of TV!

Love (EDA) at First Sight

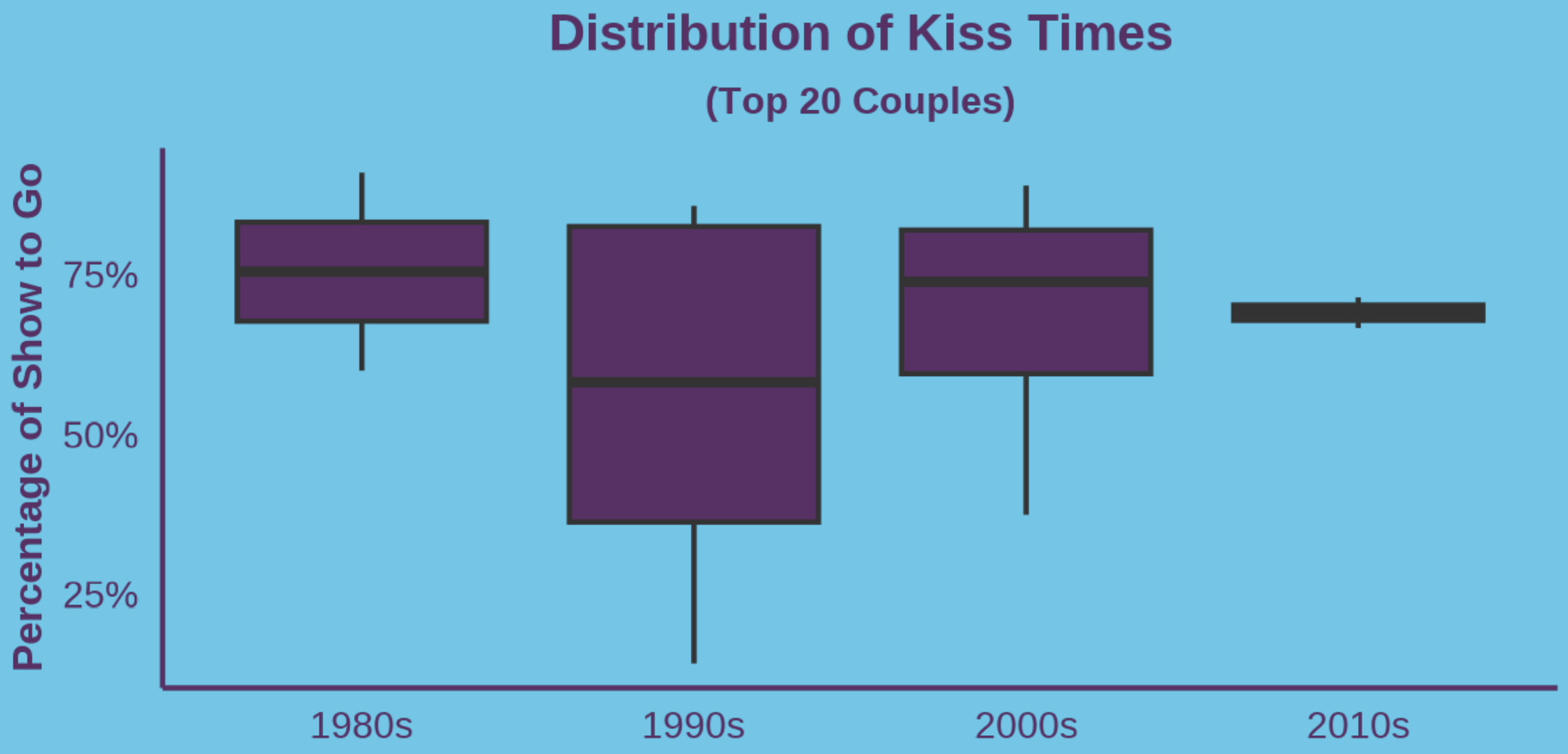

Figure: Except in the 1990s, the median first kisses of the **top 20 couples** happened within the **first third** of the show.

Analysis

- An **interrupted time series** (ITS) model[2] is used to examine the impact of a couple's **first kiss** (the interruption) on a show's **per-episode rating**.
- The model quantifies the **altered trajectories** of the ratings **after** vs. **before** the first kiss.
- Models were fit at **show-specific** (for 2 case studies) and **overall** (all 20 couples) levels.
- **Newey-West** standard errors were used to generate confidence intervals.

$$\widehat{\text{Rating}} = \hat{\beta}_0 + \hat{\beta}_1(\text{Episode}) + \hat{\beta}_2(\text{After Kiss}) + \hat{\beta}_3(\text{Episode} \times \text{After Kiss})$$

A Quick Note on Interpretation

- To address whether the episode ratings **change immediately** following the first kiss, we look at $\hat{\beta}_2$.
- To address how quickly ratings **return to pre-kiss levels** (if ever), we look at $\hat{\beta}_3$.

immediate change after first kiss

$$\widehat{\text{Rating}} = \hat{\beta}_0 + \hat{\beta}_1(\text{Episode}) + \hat{\beta}_2(\text{After Kiss}) + \hat{\beta}_3(\text{Episode} \times \text{After Kiss})$$

episode-on-episode change before the first kiss

difference in episode-on-episode change after first kiss

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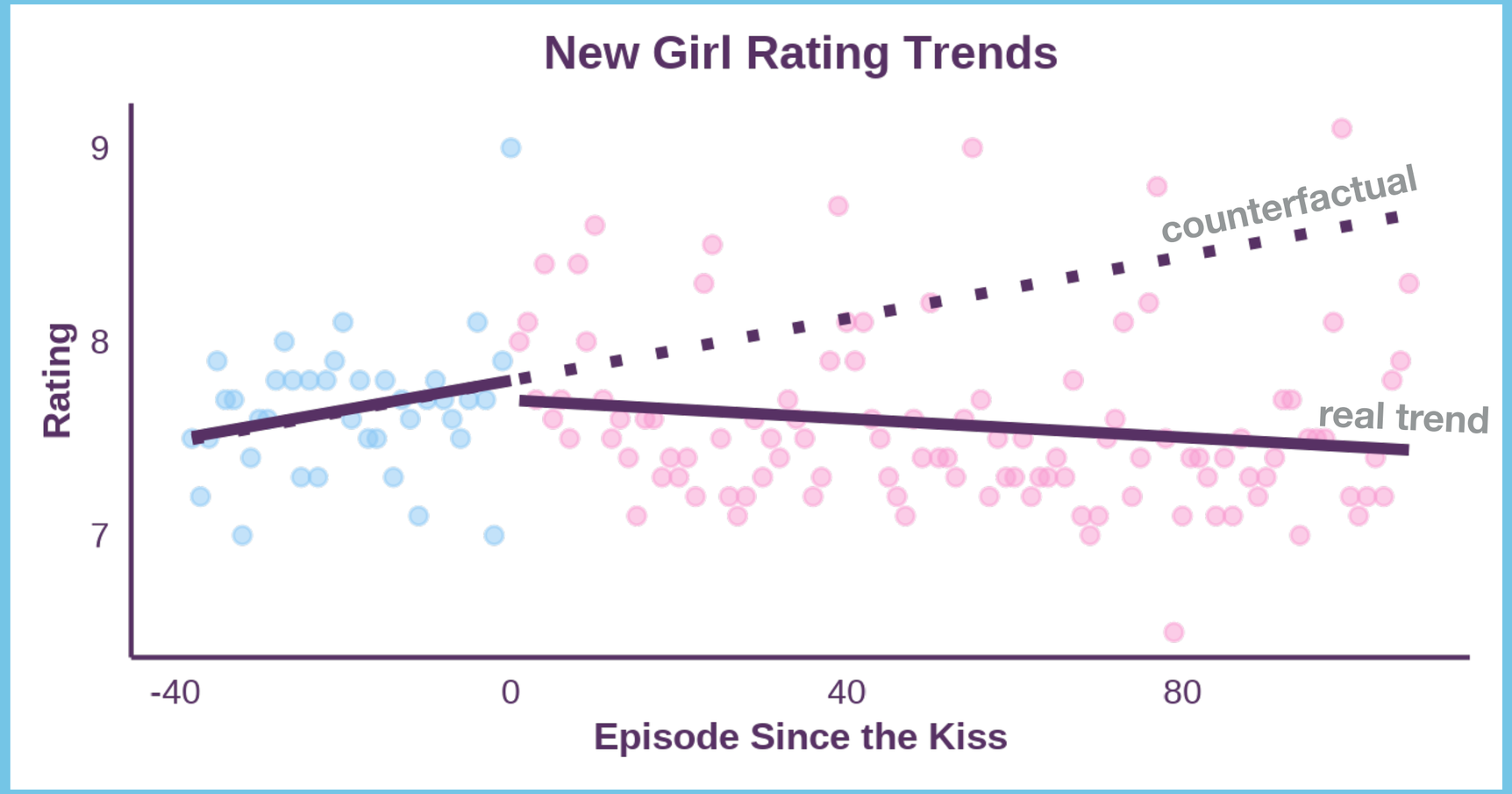
Case Study 1: Nick and Jess from *New Girl*



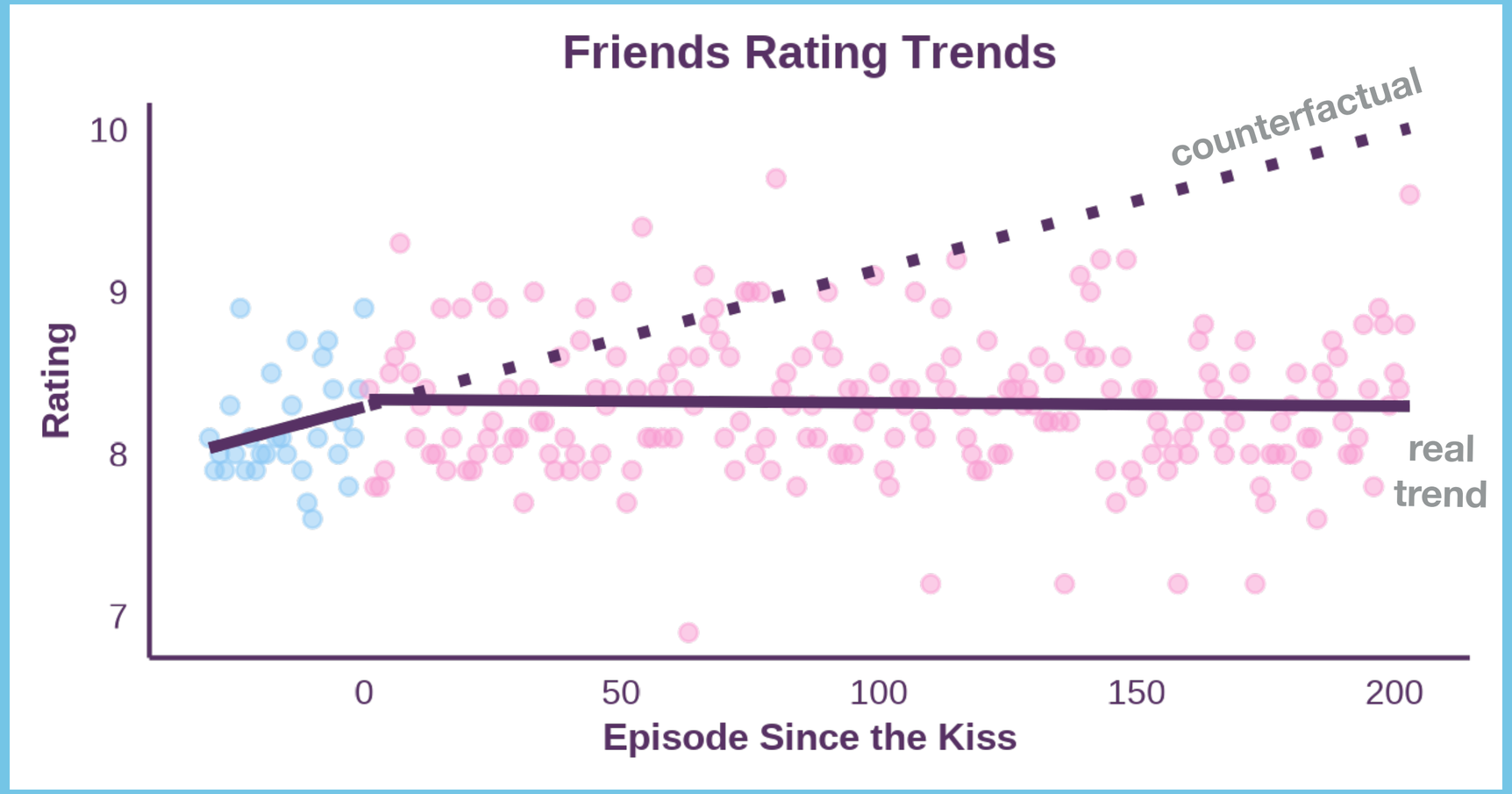
Coefficient

$\hat{\beta}_0$	(7.591, 8.007)
$\hat{\beta}_1$	(0.000, 0.016)
$\hat{\beta}_2$	(-0.338, 0.136)
$\hat{\beta}_3$	(-0.020, 0.000)

95% CI

Figure: Although the plot looks dramatic, 95% CIs show little difference if any at all.

Case Study 2: Ross and Rachel from *Friends*



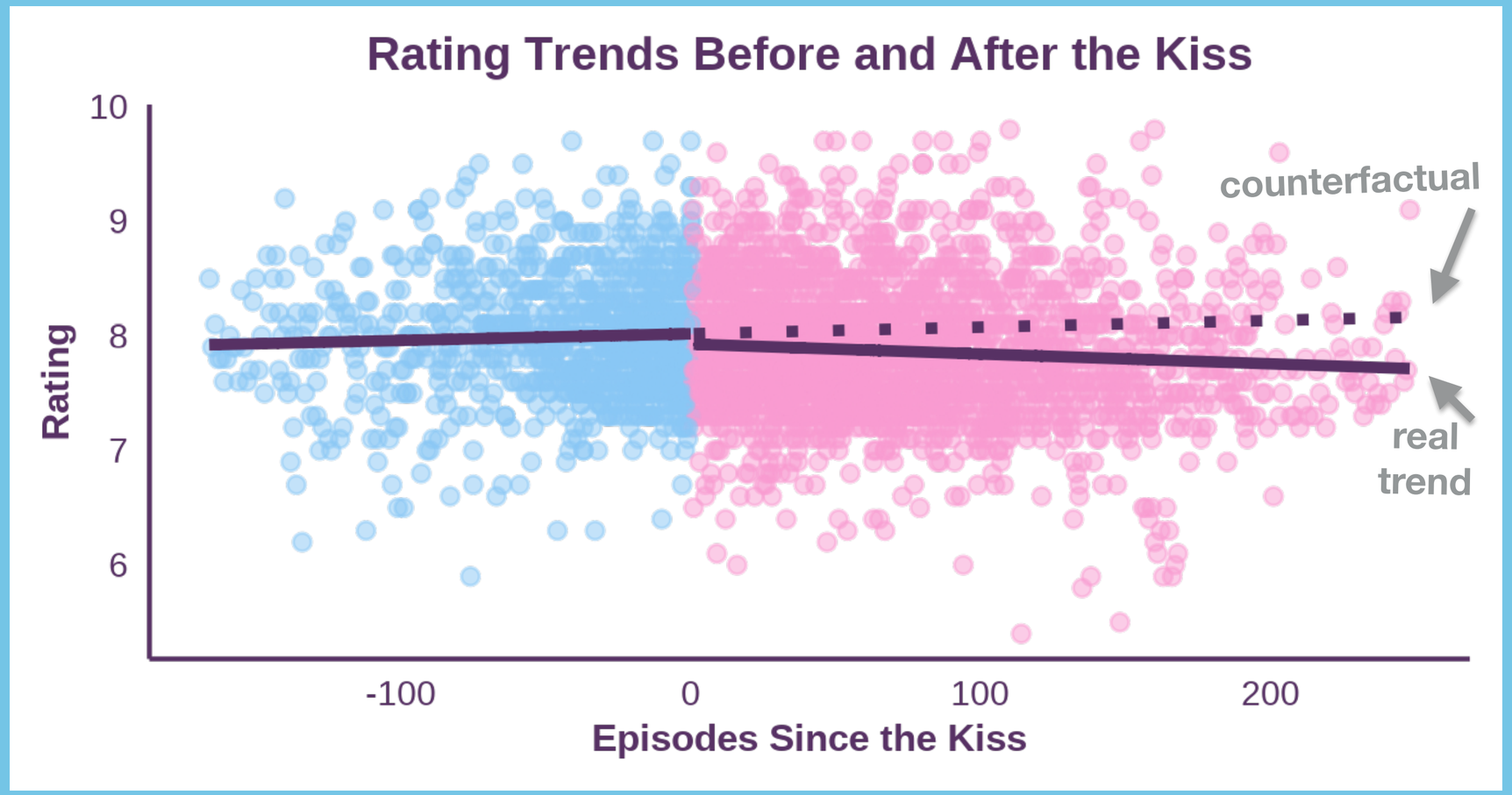
Coefficient

$\hat{\beta}_0$	(7.941, 8.643)
$\hat{\beta}_1$	(-0.008, 0.024)
$\hat{\beta}_2$	(-0.327, 0.417)
$\hat{\beta}_3$	(-0.025, 0.007)

95% CI

Figure: Again, a dramatic plot, but all of the change coefficients have zero in their CIs.

Overall Model: 20 Most-Cited Couples



Coefficient

$\hat{\beta}_0$	(7.920, 8.116)
$\hat{\beta}_1$	(-0.001, 0.003)
$\hat{\beta}_2$	(-0.225, 0.045)
$\hat{\beta}_3$	(-0.003, 0.001)

95% CI

Figure: Even after zooming out, we can't exclude the possibility of an effect in either direction.

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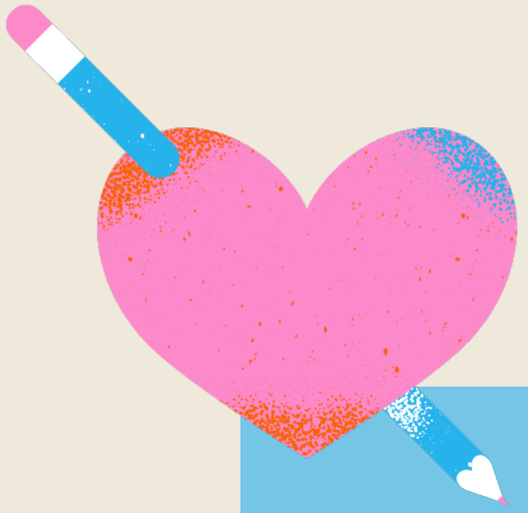
Producers, take note!

- The **top 20** most-cited couples go back as far as the **1980s**. If the producers do it right, people still talk about their work **40 years later**!
- Although the point estimates look **dramatic**, we **can’t** make a strong **argument** either for the Zeigarnik effect or the “Ashley effect” at **either** the show-specific level or the overall level.
- If Hollywood wants to keep their **ratings high** and viewers interested, they may want to consider either standing strong and **delaying these moments** to the end of the show or **introducing another dramatic storyline** to the plot. So much for love, right?

References



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3. Wikipedia (data source)

4. Internet Movie Database (data source)

Acknowledgements

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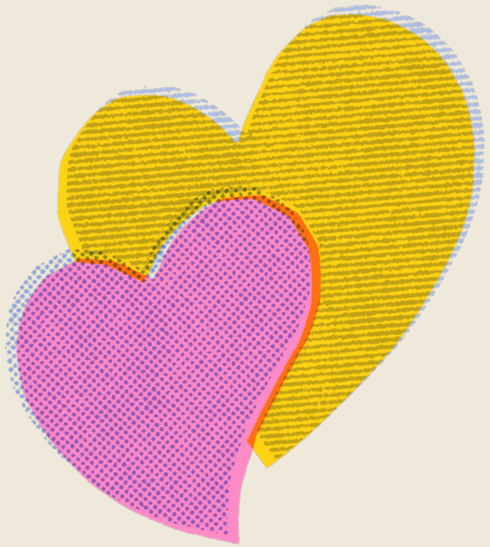
To play with this data yourself, see the DOI!

https://doi.org/10.6084/m9.figshare.24456844.v3

Thank you!



For a blog post version of this talk, see my website!

ashleymullan.github.io