

# Rate This Interruption: Using Interrupted Time Series Techniques to Analyze Popular Television Couples and Episode Ratings

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Many television shows follow the “will they or won’t they” trope, where the dynamic between a pair of main characters constantly shifts between friendship and something more throughout the run of the series. This trope has persisted throughout the decades, and examples include Sam and Diane from the 1980s show *Cheers* and Jess and Nick from the 2010s show *New Girl*. In some cases, the audience may wait multiple seasons before a couple like this gets together, and some suspect that producers delay the moment to create suspense and keep viewers engaged. Events marking major romantic milestones, such as the pair’s first kiss, often change the trajectory of the plot, influence the number of viewers tuning into the show, and drive up episode ratings. In this project, we scrape viewer ratings from the Internet Movie Database (IMDb) for 150 popular couples from 125 television series and then model the plot shifts following episodes with romantic milestones using causal inference methods. Specifically, we construct an interrupted time series model, where the interruption is the episode in which each couple has their first kiss. From this model, we assess whether these interruptions are associated with changes in viewer ratings on average.