

## Identifying Missing Component in the Bechdel Test Using Principal Component Analysis Method

**Authors :** Raghav Lakhotia, Chandra Kanth Nagesh, Krishna Madgula

**Abstract :** A lot has been said and discussed regarding the rationale and significance of the Bechdel Score. It became a digital sensation in 2013, when Swedish cinemas began to showcase the Bechdel test score of a film alongside its rating. The test has drawn criticism from experts and the film fraternity regarding its use to rate the female presence in a movie. The pundits believe that the score is too simplified and the underlying criteria of a film to pass the test must include 1) at least two women, 2) who have at least one dialogue, 3) about something other than a man, is egregious. In this research, we have considered a few more parameters which highlight how we represent females in film, like the number of female dialogues in a movie, dialogue genre, and part of speech tags in the dialogue. The parameters were missing in the existing criteria to calculate the Bechdel score. The research aims to analyze 342 movies scripts to test a hypothesis if these extra parameters, above with the current Bechdel criteria, are significant in calculating the female representation score. The result of the Principal Component Analysis method concludes that the female dialogue content is a key component and should be considered while measuring the representation of women in a work of fiction.

**Keywords :** Bechdel test, dialogue genre, parts of speech tags, principal component analysis

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