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## 602.015 - Empirical Seminar (SE SS2022)

## STUDY: Examining gender biases in animated series for children using computational text analyses methods

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*INTRODUCTION*

The present project is planned to examine gender biases in animated series for children using computational text analyses methods, especially focusing on the characteristic like the emotional valence or the topics of the character’s dialogs.

From a variety of studies in literature, we know how widely spread gender stereotypes are in media in general, as well as in TV shows for children (e.g. Aubrey & Harrison, 2004; Baker & Raney, 2007). A present example is a New York Post news article that was published online in July 2021. It states that children obviously start speaking in a British dialect due to watching the series *Peppa Pig* during the pandemic. By children *Peppa Pig* is a highly demanded series.

From literature we also know, that male characters outnumber female characters by 2:1 (Aubrey & Harrison, 2004), they appear on screen more often, speak more words, ask more questions and have more questions directed towards them compared to female characters (Biddle 2017).

In 1961 Albert Bandura, a founder of the Social-Cognitive Theory, stated that children learn socially positive and negative behaviour through observation of others showing this behaviour and so act as a model. Four years after that, he could also show that these implications are even true for children, observing behaviour through a television program. This was done in form of video clips showing aggressive behaviour and different kinds of shown consequences of another adult person to this behaviour (Bandura, 1965).

According to Social-Cognitive Theory the gender-development of children is influenced through modeling, enactive experience and direct tuition (Bussey & Bandura, 1999). So, children are provided with gender-linked information by models in their direct environment, with whom they look up to, for example their parents and attachment figures. The social results of enactive experience after showing gender-related behaviour are additional valuable information in the development of a person’s gender role. Direct tuition is often used to generalize the validity of certain modeled examples and certain behavioural experiences.

The authors so strongly suggest, that social contexts (also media) provide a wide variety of learning opportunities for young children in terms of gender role development as one key factor.

Following this, the development of children’s gender role development may be influenced e.g. by the above-mentioned underrepresentation of female characters in children’s tv-series.

In this project we want to analyse currently popular animated series for children regarding possible gender biases using analyses of character’s dialogs.

In table 1 research questions and hypotheses are listed also implicating the expected results.

Table 1: Study’s research questions and hypotheses

|  |  |
| --- | --- |
| ***Hypothesis*** | ***Research Question*** |
| H1 | Differences in the topics of expressed statements by characters depending on their gender is expected between as well as within a series. |
| H2 | A difference in the emotional valence of expressed statements by characters depending on their gender is expected between as well as within a series. |
| H3 | Differences in the following parameters depending on a character’s gender are expected (again between and within series)   * Number of words spoken * Number of questions asked * Number of answers given * Number of statements in general independent of the parameters above. |
| H4 | Differences in the gender distribution of occurring characters in a series, especially in main characters are expected as e.g. girls are more likely to tolerate male main characters as boy tolerate female characters. |

*METHODS*

In this section the methods used to conduct this study are specified.

*Selection of series:*

In this study popular animated series for children will be examined regarding the above-mentioned hypotheses. One can imagine the bread variety of tv and streaming programs for children.

To choose from this variety, we will focus on most demanded and currently high-rated series in the United States of Amerika (March/April 2022) by the viewer ratings posted on the IMDb website. This is done knowing that one cannot act on the assumption that children rated the series themselves but their parents or attachment figures.   
In order to analyse the dialogs the availability of full and detailed transcripts is crucial. Therefore, a series’ popularity is important as full transcripts of episodes are more likely to be available with popular series.

*Extracting the episodes’ Transcripts:*

The episodes’ transcripts are gathered from various web sources, preferably those of their producing networks. The transcripts can either be downloaded from there directly or have to be web scrapped using different R extension to store them for further analyses. It would be best if all the episodes released so far can be extracted to be able to analyse them.

*Statistical Analyses*

The computing of emotional valence and prevalent topics will be conducted using R and the different sentiment analysis software bundle like eg. “sentiment.ai” or “VadR”.

Statistical analysis (descriptives, differences in means) are conducted using R according to the above-mentioned hypotheses.

*ETHICS*

Due to the fact that this study is focused on computationally analysing dialogs in animated series for children and therefor no personal contact is needed and intended (observation, interview etc.) no ethics proposal is handed in.

*LITERATURE*

Aubrey, J. S., & Harrison, K. (2004). The Gender-Role Content of Children's Favorite Television Programs and Its Links to Their Gender-Related Perceptions. Media Psychology, 6(2), 111–146. [https://doi.org/10.1207/s1532785xmep0602\_1](https://psycnet.apa.org/doi/10.1207/s1532785xmep0602_1)

Baker, K., & Raney, A. A. (2007). Equally super?: Gender-role stereotyping of superheroes in children’s animated programs. Mass Communication & Society, 10(1), 25-41. DOI: [10.1080/15205430709337003](https://doi.org/10.1080/15205430709337003)

Bandura, A. (1965). Influence of models' reinforcement contingencies on the acquisition of imitative responses. Journal of Personality and Social Psychology, 1(6), 589–595. [https://doi.org/10.1037/h0022070](https://psycnet.apa.org/doi/10.1037/h0022070)

Biddle, A. M. (2017). Gender Stereotypes within TV shows for Preschoolers and their Effects on Children's Stereotypes, ProQuest Dissertations Publishing. http://hdl.handle.net/10125/62738

Bussey, K., & Bandura, A. (1999). Social cognitive theory of gender development and  
differentiation. Psychological Review, 106, 676-713.

Lungariello M. (2021, July 18). ‘Peppa Pig’ effect has kids speaking in British accents during pandemic. *New York Post*. <https://nypost.com/2021/07/18/peppa-pig-effect-has-kids-speaking-in-british-accents-during-pandemic/>