Metastereotyping, anticipatory epistemic injustice, and defensive storytelling

AFFILIATIONS

Psychology Honors Thesis

May 23, 2024

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It can be difficult to have productive conversations with people from different backgrounds because of the biases and preconceived notions everyone carries. Defensive storytelling is one strategy meant to disconfirm negative stereotypes individuals believe others hold about them.

Introduction

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Conversations are so much more than the words that are said. Social systems and structures affect how people engage in conversations (Berger & Packard, 2021; Lewis & Lupyan, 2020; Talaifar et al., 2020).

Key Concepts & Definitions

Epistemic Injustice

Certain groups are systematically silenced and excluded from participating (Dotson, 2011; Ichikawa, 2020; Fricker, 2007) Metastereotyping

Individuals can interpret or perceive the biases that others may hold about them (Amâncio, 2003; Klein & Azzi, 2001; Wout et al., 2009)

Anticipatory Epistemic Injustice

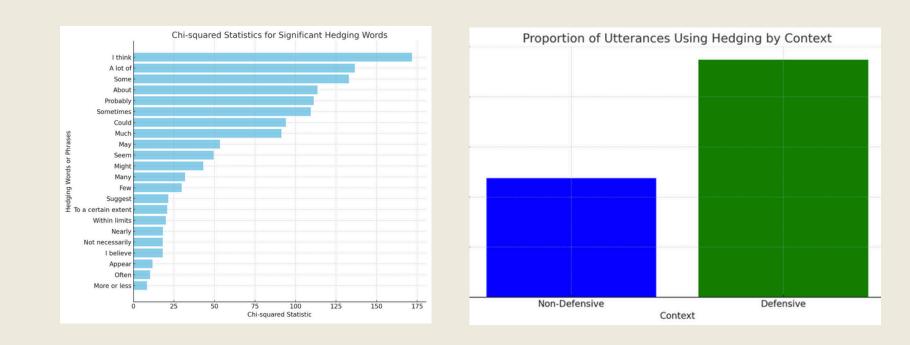
These injustices are anticipated by speakers, and people are silenced by expectations before they even speak (Lee, 2021; Dotson, 2011)

Defensive storytelling: A specific type of narrative meant to disconfirm negative stereotypes individuals believe others hold about them

Hedging & Uncertain Language Methodology & Results

Methods

- List of hedging words and phrases
- Frequency of hedging words
- Chi-squared tests



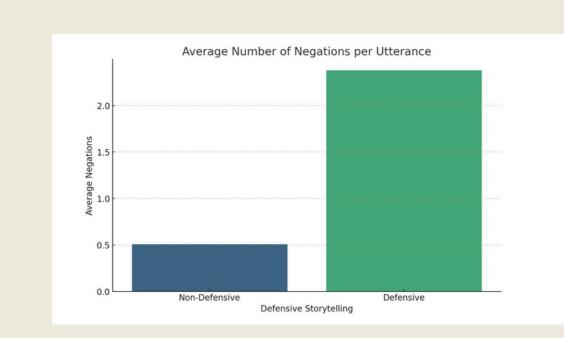
Results

- Hedging language is significantly more prevalent in defensive storytelling
- 22 words and phrases were statistically significantly more frequently used

Negations Methodology & Results

Methods

- Defined negation structure
- Calculated the frequency of negations
- Chi-squared test



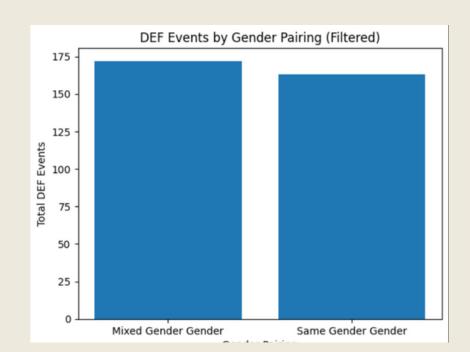
Results

- Hedging language is significantly more prevalent in defensive storytelling
- Negation use is significantly more prevalent in defensive storytelling

Gender Methodology & Results

Methods

- Define gender conditions and count number of defensive storytelling events used in each
- Normalize the data on the basis of length of conversational turns
- Analyze using a linear model



Results

No significant results

Research Questions & Hypotheses

- Are there certain **linguistic / structural** features of defensive storytelling?
- Defensive storytelling involves a higher frequency of uncertain language than nondefensive storytelling language.
- Defensive storytelling involves a higher frequency of **negations** than non-defensive storytelling language.
- Do participants' **genders** affect the frequency of their use of defensive storytelling?
- Defensive storytelling will be more prevalent in conversations between people of different genders than people of the same gender because there is an added dimension of difference and stereotyping in these conversations.
- Is defensive storytelling concentrated around specific topics?
 - More politicized topics will more frequently include defensive storytelling events than other, more mundane topics.

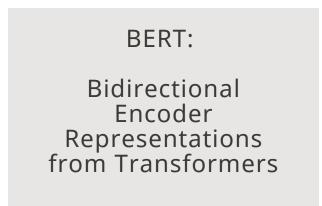
Data Overview

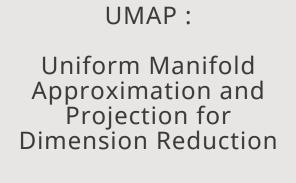
- 155 conversations from the Storycorps "One Small Step" initiative
- Each between 2 participants
- ~50 minutes
- Inherently political in nature
- Pre-processed to remove third party speakers (i.e. facilitators)
- Tagged with events of defensive storytelling
 - At least two taggers had to identify an utterance as containing defensive storytelling for it to be considered a "valid" defensive storytelling event

Topic Analysis Methodology & Results

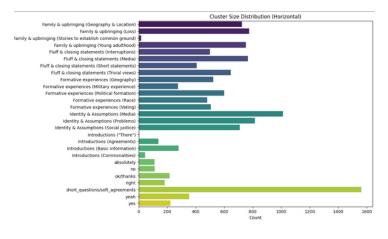
Methods

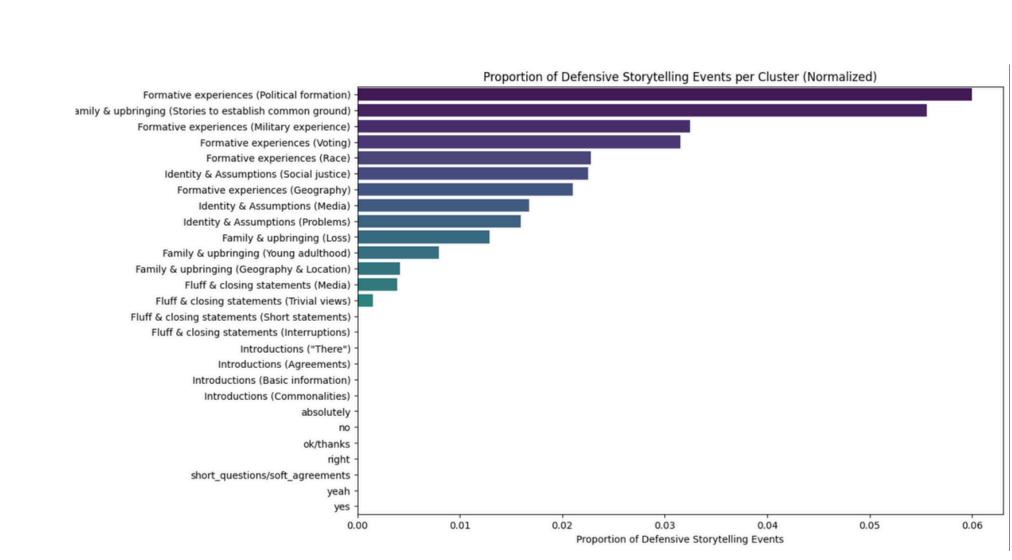
- Clustered topics into thematic subgroups
- ANOVA to test for a difference in frequency of defensive storytelling across clusters
- Used Tukey HSD to identify which pairs of clusters are significantly different
- Repeated excluding trivial clusters





K-Means: Clustering into 12 initial clusters Iterative Clustering: Clustering down into meaningful clusters





Results

• Differences in the frequency of defensive storytelling use across different clusters

Cluster 0 Fluff & closing statement

Cluster 1 Formative experiences

Cluster 10 Family & upbringing

Cluster 3 "right"

Limitations & Future Research

Limitations

- Inconsistencies within the data
- Hand-labeling
- Null results for gender
- Lack of significance when normalized by length

Future Research

- More, different topics
- More diverse participant pool
- Does defensive storytelling work?

Conclusions

- Events of defensive storytelling may be clustered around certain topics
- While identity factors such as gender may impact who does defensive storytelling, this idea was not supported in this dataset
- There are identifiable linguistic features of defensive storytelling, such as hedging and negations