

Can AI writing be as rhetorical as human writing?

A study of research article abstracts

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Rhetorical purposes of research article (RA) abstracts

- ▶ **Purposes:**
 - ▶ *Informative* – to summarize the gist of a study
 - ▶ *Persuasive* – to convince and to attract
- ▶ **Two major types:** informative vs persuasive abstracts

Rhetorical structures

(Lorés 2004; Samraj, 2005; Tankó, 2017)

Informative
Introduction (purposes)
Methodology
Results
Discussion

Persuasive (CARS moves, cf. Swales, 1990)

Establishing the Territory

Centrality claiming

Making topic generalizations

Reviewing items of previous research

Establishing the niche

Counter-claiming

Gap-indicating/problematizing

Question raising

Tradition continuation

Occupying the niche

Announcing the study or its purposes

Announcing results of the study

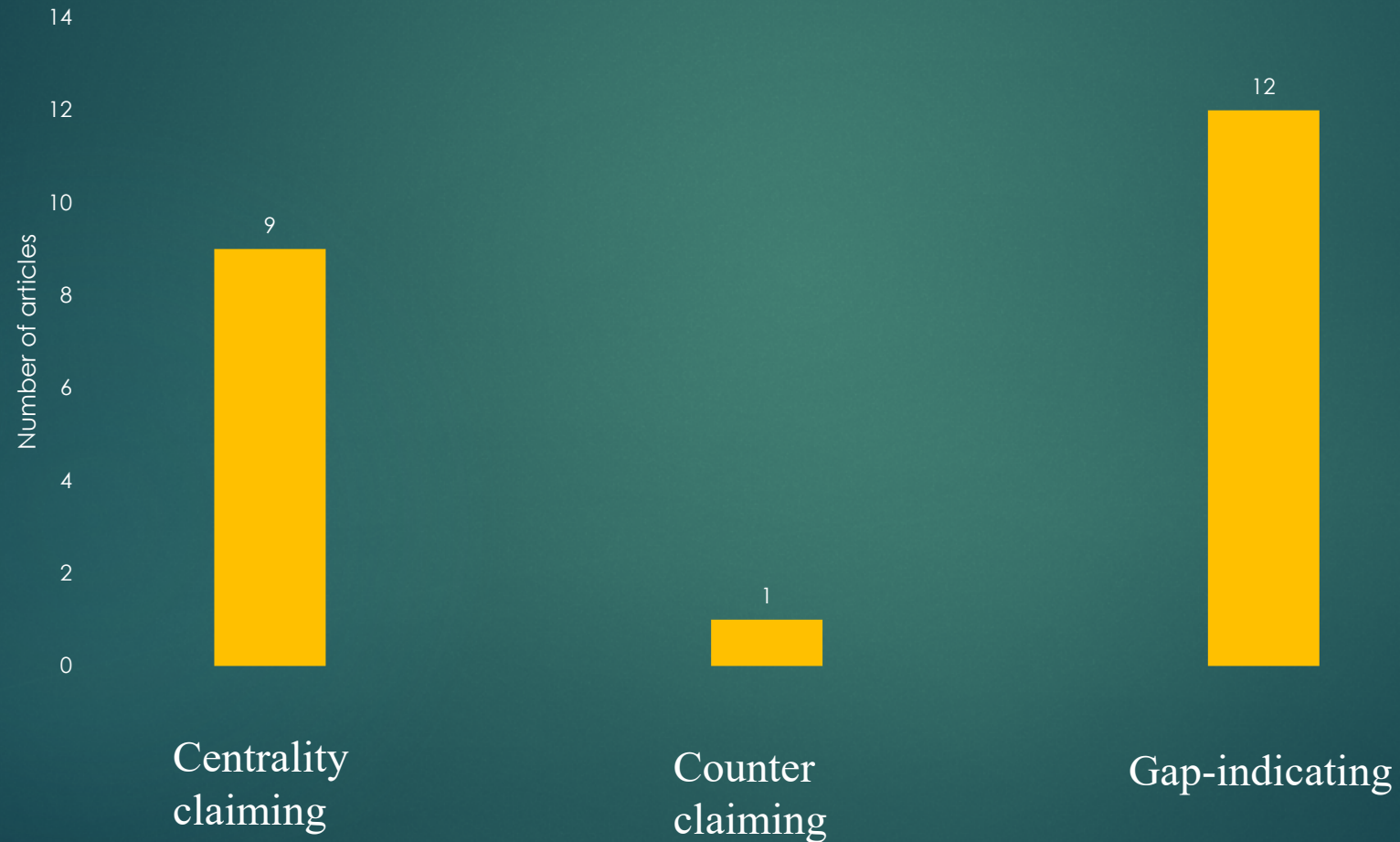
The corpus

Total number of texts analyzed: 60

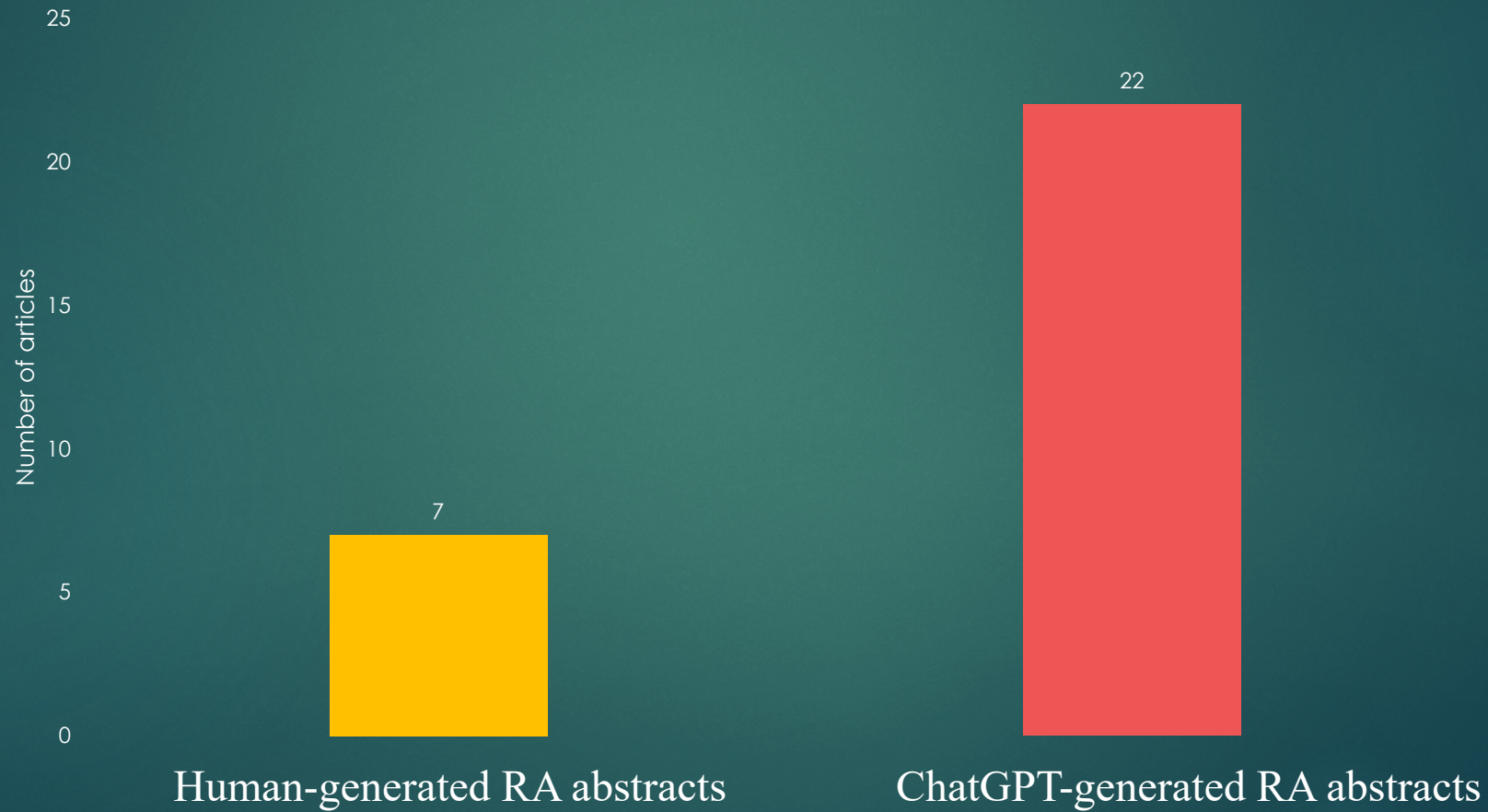
- 30 original RA abstracts sourced from academic journals in Applied Linguistics
- 30 AI-produced RA abstracts generated by Open AI's ChatGPT 3.5

Occurrences of rhetorical strategies

Observed in human-generated texts only (N= 22)



Occurrences of research implications



“Implications”: human vs ChatGPT

Human-generated

The paper also discusses **the implications of this research for genre theory and ESP instruction**. (*Tardy, 2023*)

ChatGPT-generated

Additionally, the implications for English for Specific Purposes (ESP) instruction are discussed, advocating for a pedagogical approach that pairs traditional academic genres with activities fostering genre awareness and rhetorical flexibility in digital spaces. (*Tardy, 2023*)

'Findings': Human vs. ChatGPT

▶ Human-generated

[Purposes] The two-fold purpose of this study was to 1) identify the rhetorical conventions of stand-alone BI sections, 2) compare the use of rhetorical conventions in the BI sections of funded and non-funded proposals. **[Findings]** The analysis yielded a descriptive **model of 3 moves and 9 steps, named Contextualize-Demonstrate-Predict**, which was applied to the annotation of the entire corpus.

Descriptive and statistical analyses of the annotated data provided **a rich description of the composition of BI discourse in terms of primary and secondary rhetorical functions**, also revealing similarities and differences in move and step distribution, functional prominence, and language use in the BIs of funded and non-funded proposals. *(Cotos_2019)*

▶ ChatGPT-generated

[Purposes] This research paper explores the rhetorical conventions of Broader Impact (BI) statements in National Science Foundation (NSF) grant proposals, ... **[Findings]** **The proposed CDP move/step model** delineates the rhetorical structure of BI sections, portraying them as a distinctive part-genre characterized by a blend of narrative and argumentative discourse units. A key distinction emerges between BI moves and those in traditional grant proposals, emphasizing the BI's orientation towards societal impact rather than scientific outcomes. Comparative analysis of funded and non-funded proposals reveals similarities in rhetorical composition but nuances in move co-occurrence and sequencing. *(Cotos_2019)*

Can ChatGPT really produce texts as rhetorically as humans do?

ChatGPT can generate informative abstracts mainly and cannot write as rhetorically as humans do.

What is the moral of the story then?

What could students and teachers do?

