Running head: REPLICATION: WANG ET AL. (2020)

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Does Double-Hard Debias Keep its Promises? - A Replication Study

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Author Note

- The authors made the following contributions. Kristina Kobrock: müssen wir
- 6 natürlich nicht ausfüllen; Meike Korsten: ...; Sonja Börgerding:

Does Double-Hard Debias Keep its Promises? - A Replication Study

- Just edit the text! There are several websites that help with (r)markdown,
- e.g. https://rmarkdown.rstudio.com/. If you don't want to edit directly, but rather
- comment use: Cite using: Wang et al. (2020) said that... or simply blablabla (Wang et
- al., 2020). References must be added to r-references.bib file.

12 Introduction

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• shall we include an abstract?

Bias in Embeddings.

- some text on bias in embeddings and why it's useful to do research in that field
- summary of related approaches (or put it in the discussion?)

17 Motivation.

• rough description of the specific study (Wang et al.) & motivation of replication
attempt (maybe some general remarks on the need for replication studies)

20 Implementation

- task description
- explanation of model and training choices
- Datasets and Preliminaries.
- Hard Debias.
- Double-Hard Debias.

26 Evaluation

- stick to the paper
- Baselines.
- Evaluation of Debiasing Performance.
- Debiasing in Downstream Applications.
- 31 Coreference Resolution.
- no replication possible, no code provided
- Debiasing at Embedding Level.
- 34 The Word Embeddings Association Test (WEAT).
- 35 Neighborhood Metric.
- discuss that this is shady in the discussion part
- 37 Analysis of Retaining Word Semantics
- Word Analogy.
- $Concept \ Categorization.$

40 Discussion

- analysis of results and evaluation of performance evaluation
- ablation studies (not applicable)
- discuss the results and what could be (partly) replicated and what not

44 Conclusion

45 References

- Wang, T., Lin, X. V., Rajani, N. F., McCann, B., Ordonez, V., & Xiong, C. (2020).
- Double-hard debias: Tailoring word embeddings for gender bias mitigation.
- 48 Association for computational linguistics (acl).