

Author Queries (Article #1024643)

1 Please note that it is now too late to add additional ORCID iDs. Following ORCID's guidelines, the publisher can include only ORCID iDs that the authors specifically verified in SageTrack during the peer-review process, before official acceptance for publication.

Noted.

2 Please check that all authors are listed in the proper order; clarify which part of each author's name is his or her surname; and verify that all author names are correctly spelled/punctuated and are presented in a manner consistent with any prior publications.

The surname for Matt Cooper Borkenhagen is "Cooper Borkenhagen".

3 Please review the entire document for typographical errors, mathematical errors, and any other necessary corrections; check headings, tables, and figures.

Pg 2: "We focused on the extent to which words in texts are associated with males and which with females, which we term the words' *gender bias*." Please change to ->

"We focused on the extent to which words in texts are associated with males **versus** females, which we term the words' *gender bias*."

Pg. 2: "We began by describing the construction and properties of the Wisconsin Children's Book Corpus (WCBC). We then quantified gender biases in individual books and the corpus as a whole using two methods." Please change to ->

"We **begin** by describing the construction and properties of the Wisconsin Children's Book Corpus (WCBC). We **first quantified** gender biases in individual books and the corpus as a whole using two methods."

Pg. 3: "The study was approved by the University of Wisconsin- Madison Research Ethics board" Please change to -> "Studies involving human subjects (1a and 1c) were approved by the Institutional Review Board."

Pg. 6: Heading "validation of book-gender-bias measure" Please change to -> "validation of book gender bias measure"

Pg. 14, Funding: "M. C. Borkenhagen" Please change to -> "M. Cooper Borkenhagen"

4 Please confirm that you have sufficiently reviewed your proof and queries, and that you understand this is your FINAL opportunity to review your article before publication.

Yes, we have reviewed the proof and queries.

5 Please provide page number for quote.

This is not a direct quote; it's a reference to the exact phrase "very, very smart".

6 Please clarify meaning of the following phrase.

“For example, Cimpian and Markman (2011) found that when a novel game was introduced to children using a generic subject (“Girls are really good at a game called ‘gorp’”), they were more likely to associate it with the gender than when it was introduced with a specific subject (“There is a girl who is good at...”)." → please change to:

For example, Cimpian and Markman (2011) found that when a novel game was introduced to children using a generic **gendered** subject (“Girls are really good at a game called ‘gorp’”), **children** were more likely to associate **the game** with the gender than when it was introduced with a specific **gendered** subject (“There is a girl who is good at...”).

7 Are the files at GitHub just for Study 1a or for other studies in this article as well?

All the studies in the article.

8 Please indicate which anchor was 1 and which was 5.

“Very masculine” was 1 and “Very feminine” was 5.

9 Please note that all numbers in brackets have been identified as 95% CIs, but please advise if this isn't correct.

This is correct.

10 Please verify that edits to all figure captions are correct.

Figure 1 - The labels on the plot have been changed in editing. Facet labels should match labels on x-axis.

“Feminine biased” → please change to “female biased”

“Masculine biased” → please change to “male biased”.

Figure 2 - “Book content bias as a function of character gender bias” → please change to:

“**Gender** content bias as a function of character gender.”

(note that figure (2a) and (2b) differ in how character gender is measured. In (a) it is as a bias score, and in (b) it is as a categorical variable).

Figure 4 - “Average human judgment of word gender bias as a function of books' tendency to describe the main character's traits (triangles) and actions (circles) as male biased, neutral, or female biased (Study 1c)” → please change to:

“Average human judgment of gender bias of main character’s traits (triangles) and actions (circles) as a function of a book’s gender bias score based on all words (male biased, neutral, or female biased; Study 1c).”

Figure 5 - “Estimated magnitude of four gender biases in word-embedding models trained on children’s picture books, adult fiction, and Wikipedia (Study 2b). Biases were determined using the Implicit Association Test (IAT; for full descriptions of biases, see Table 3). Positive effect sizes indicate a bias to associate women with the stereotypical category (e.g., “family”); negative effect sizes indicate a bias to associate women with the nonstereotypical category (e.g., “career”). Data for children’s and adults’ books were obtained from the Wisconsin Children’s Book Corpus and the Corpus of Contemporary American English, respectively. Error bars show 95% confidence intervals.” → please change to:

“Estimated magnitude of four gender biases in word-embedding models trained on **children’s books**, adult fiction, and Wikipedia (Study 2b). Biases were determined **by applying the Implicit Association Test (IAT) to the word embedding models (for full descriptions of biases, see Table 3)**. Positive effect sizes indicate a bias to associate women with the stereotypical category (e.g., “family”); negative effect sizes indicate a bias to associate women with the nonstereotypical category (e.g., “career”). Data for children’s and adults’ books were obtained from the Wisconsin Children’s Book Corpus and the Corpus of Contemporary American English, respectively. Error bars show 95% confidence intervals.”

(The IAT is a behavioral paradigm, we applied an analogous version to word embedding models).

Figure 6 - “Proportion of female audience as a function of character gender (Study 3). The scatterplot (a) shows the relation between the female audience for each book and the book’s mean character gender score. The solid line shows the best-fitting linear regression, and the error band shows standard errors. The violin plots (b) shows the distribution of female audience members across books as a function of primary-character gender. Colored points show individual books. The dashed line shows the grand mean proportion of female audience. Black points show means, and error bars show bootstrapped 95% confidence intervals. The width of each violin indicates the density of the data.” → please change to:

“Proportion of female audience as a function of character gender (Study 3). The scatterplot (a) shows the relation between the female audience for each book and the book’s mean character gender score. The solid line shows the best-fitting linear regression, and the error band shows standard errors. The violin plots (b) **show** the distribution of female audience members across books as a function of primary-character gender. Colored points show individual books. The dashed line **corresponds to an audience that is half female**. Black points show means, and error bars show bootstrapped 95% confidence intervals. The width of each violin indicates the density of the data.”

11 Please verify that edits to the following sentence are correct.

“Book content bias as a function of character gender bias” → please change to: “**Gender** content bias as a function of character gender.”

Note that figure (a) and (b) differ in how character gender is measured. In (a) it is as a bias score, and in (b) it is as a categorical variable. Other edits are correct.

12 Please provide mean age of participants.

“Participants” → please change to “**adult** participants” (we did not collect exact ages).

13 Please provide df for each t test in article.

The t-values reported here are for linear mixed-effect models. There are not well-established methods for defining degrees of freedom for these types of models. Degrees of freedom are given in all other places in the article where traditional t-tests are conducted.

14 Please verify that edits to following sentence are correct.

Yes, this is correct.

15 “Cveneck, Meltzoff, & Greenwald (2011a)” and “Cveneck, Meltzoff, & Greenwald (2011b)” are not listed in the references.

There is a typo in these references. They should be changed in the table as follows:

“Cveneck, Meltzoff, & Greenwald (2011a)” -> “Cveneck, **Meltzoff, & Greenwald (2011)**”

“Cveneck, Meltzoff, & Greenwald (2011b)” -> “Cveneck, **Greenwald, & Meltzoff (2011)**”

16 Is Cohen's d being used for effect size in this figure?

No. The method for calculating the effect size is described in the Method section of Study 2b.

17 Please verify that edits to the following sentence are correct.

“The dashed line shows the grand mean proportion of female audience.” → please change to:

“The dashed line **corresponds to an audience that is half female.**”

The edits are otherwise correct.

18 Please verify that this statement is correct as added.

This is correct.

19 *“Cvencek, Greenwald, & Meltzoff, 2011” is not cited in text. Please indicate where a citation should appear or allow us to delete the reference.*

This citation has now been added to Table 3. (see AQ15)