

MindMargin: How Article-Adjacent Comments Challenge Our Opinions

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Introduction

Commenting systems are a popular means for facilitating conversation among readers online. Typically, comments are displayed below articles. However, the increasing prevalence of insulting and low-quality comments has motivated us to question the existing system.

Supported by prior research in education, we hypothesize that article-adjacent comments have the ability to motivate people to consider others' opinions, even those contrary to their own. We present MindMargin, a platform that displays textually anchored comments on an horizontal infinite scroll. This system thus exposes users to a diverse and relevant array of opinions as they read.

Experiment

We performed an online experiment with young adults (N=46 after dropouts) and assigned the participants to either MindMargin or the traditional commenting system. The participants were not asked to interact with the commenting system but to read a controversial article within 10 minutes. Then, a questionnaire for validation and stance exploration was presented.

N = 46*, 30 female, 16 male * after removing outliers and dropouts
mostly Young Adults (18-25 years)
N_mindmargin = 19
N_traditional = 27

Results

- Participants with prior exposure reported less extreme Stance Polarization (SP)

MindMargin	Traditional
read: m=17.3	m=22.1
seen: m=10.1	m=23.2

- Significant main effect of MindMargin on Attitude Toward Comments (ATC)

MindMargin	Traditional
positive: 42.86%	8.33%
negative: 10.71%	61.11%
neutral: 46.43%	30.56%

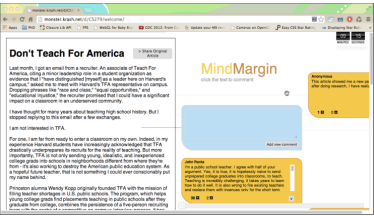
Discussion

The lower SP values among MindMargin users reveal that participants with MindMargin who had prior exposure to the article reported less polarized views to reading the article for a second read or glance. MindMargin users also had a significantly more positive impression of the comments (ATC). This suggest that MindMargin exposes readers to comments when they are most relevant to the reader, making the comments seem more engaging, thoughtful, and reliable.

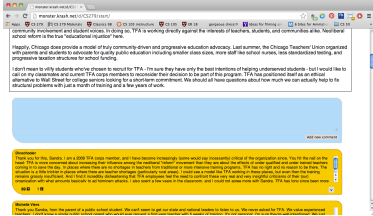
References

MindMargin

We implemented two commenting systems. The first commenting system is MindMargin with anchored comments on a horizontal infinite scroll next to the reference medium.



The MindMargin interface.



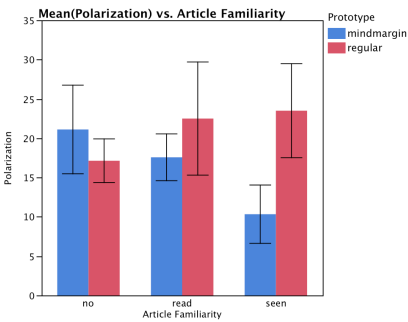
The traditional interface.

The second commenting system is a traditional vertical interface with comments below the reference medium.

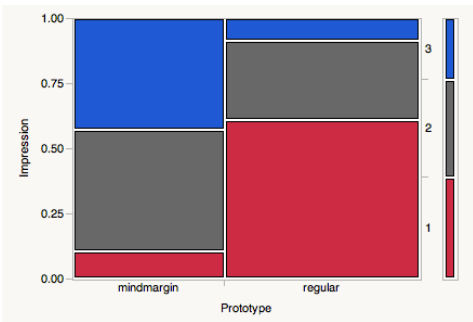
MindMargin exposes the reader to relevant comments at all times.

Between-Subject factorial design with two dependent variables:

1. Stance Polarization (SP) capturing participant's personal stance on the article (on a scale from 0-Strongly Pro to 100-Strongly Against)
2. Attitude Toward Comments (ATC) describing their reaction to the comments (classified as Positive, Negative, Neutral and Invalid)



Less SP with MindMargin when participant was prior exposed to the article.



With MindMargin, the majority of participants described the comments as positive (3), rather than neutral (2) or negative (1).