Integrating Conflicting Information from Multiple Texts: Effects of Prior Attitudes and Text Format

Problem statement
What is the influence of prior attitudes on the integration of conflicting information, and does this differ for text format (linear vs. nonlinear)?

Method
- Participants (117 Dutch pre-university students aged 15-18 years) read multiple texts (about 3000 words) on the relationship between violent videogames and aggression. Texts were presented on a computer screen in either a linear format (to be read from top-to-bottom) or in a nonlinear format (including hyperlinks), and included conflicting information (balanced positive/negative). A between-subjects design was used.
- Participants were asked to read the materials and write a short text on the topic. As a global measure of integration, these texts were scored on perspective (ambiguous, tentative, one-sided) and position (positive, negative, neutral) taken by the participant. As such, we could assess the extent to which participants acknowledged the ambiguity of the information in the texts – and thus acquired a clear overview of the debate – as well as the influence of their prior attitudes.

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Ambiguous</th>
<th>Two-sided; No or a neutral conclusion in the text</th>
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</thead>
<tbody>
<tr>
<td>Tentative</td>
<td>Two-sided, but author draws conclusion in favour of one side of the debate</td>
<td></td>
</tr>
<tr>
<td>One-sided</td>
<td>Author discusses only one side or uses the other side solely to refute it</td>
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Preliminary results
- Students with more positive attitudes were significantly more likely to write tentative or one-sided texts;
- But: Boys were significantly more likely to write one-sided texts than girls, who were more likely to write ambiguous texts (i.e., a significant gender effect);
- Students with more positive attitudes were significantly more likely to express a favourable position toward violent videogames in their texts;
- Thus, (strong) prior attitudes appear to hamper integration.
- But: There were no significant effects of text format on global integration.

Further analyses
More fine-grained analyses on the level of idea units are carried out momentarily. Information in participants’ written texts is coded as borrowed, added, or transformed. In addition, an eye-tracking study using the same tasks and materials is carried out to see how participants process information that is inconsistent with their prior attitudes (e.g., do they ignore it?).

Questions for round-table discussion
- How to interpret the significant effects of gender? Is it really a unique predictor or simply a result of the overrepresentation of boys with more favourable prior attitudes?
- What are alternative ways to study and measure integration of conflicting information?

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