## File names and descriptions

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| File name | Description |
| Process measures.csv | This CSV file contains the calculated sentence production and global linearity measures for all participants |
| Understanding scale pre and post scores.csv | This CSV file contains all participants’ pre- and post-test scores on each item of the Subjective Understanding Scale. |
| WBI study 3 full data.csv | This CSV file contains all participants’ scores on each item of the Galbraith and Baaijen (in preparation) Writing Beliefs Inventory |

## Variable names and descriptions

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| Variable name | Description |
| PP/Participant | Participant ID |
| Mean\_LBS\_Pause | Mean linear between sentence pause time (milliseconds) |
| Percent\_LBW\_Over\_Two\_Seconds | Proportion of linear between sentence pauses that are over two seconds in length |
| Percent\_R\_Burst | The number of RRL and PRL bursts expressed as a percentage of the total number of bursts. |
| P\_Burst\_Words\_Percent | The total number of words produced in P-bursts, expressed as a percentage of the total number of words in the keystroke log. |
| Total\_Chars | Total number of characters in the keystroke log |
| Final\_Text\_Total\_Chars | Total number of characters in the final text product |
| Text\_Modification | The total number of characters produced in the keystroke log, divided by the total number of characters in the final text. |
| Percentage\_LBS | The number of linear transitions between-sentences as a proportion of the total number of sentence transitions. |
| Percentage\_LBW | The number of linear transitions between-words as a proportion of the total number of word transitions. |
| Production\_Cycles | Number of text production cycles |
| Event\_Percentage | The percentage of total time spent writing that is devoted to operations other than producing text or pausing. |
| I\_Burst\_Percentage | The number of I-bursts, expressed as a percentage of the total number of bursts. |
| Sentences\_out\_of\_order | Every time an individual moved away from the leading edge to insert a new complete sentence. |
| Sentences\_Final\_Order | Number of sentences in the final text product, minus the number of sentences made out of order |
| Sentence\_Linearity | Total number of sentences in the final text product minus the number of sentences produced in sequential order |
| Condition | Experimental condition, where O = outline planning with final drafting and S = synthetic planning with rough drafting |
| Dyslexia | Whether participant has a dyslexia diagnosis, where D = dyslexia and ND = no dyslexia |
| Format | Format that the experiment was conducted in, where P = in person and O = online |
| Uscale\_1\_1 | Pre-test Understanding scale item: Knowledge about the topic. 1 = very little, 7 = a great deal |
| Uscale\_1\_2 | Pre-test Understanding scale item: How well you understand the topic. 1 = very little, 7 = a great deal |
| Uscale\_1\_3 | Pre-test Understanding scale item: How organised your thoughts about the topic are. 1 = very little, 7 = a great deal |
| Uscale\_1\_4 | Pre-test Understanding scale item: How well you could explain the topic. 1 = very little, 7 = a great deal |
| Uscale\_1\_5 | Pre-test Understanding scale item: How clear your thoughts about the topic are. 1 = very little, 7 = a great deal |
| Uscale\_1\_6 | Pre-test Understanding scale item: How clear your interpretation of the topic is. 1 = very little, 7 = a great deal |
| Uscale\_1\_7 | Pre-test Understanding scale item: How coherent your thoughts about the topic are. 1 = very little, 7 = a great deal |
| Uscale\_1\_8 | Pre-test Understanding scale item: How structured your thoughts about the topic are. 1 = very little, 7 = a great deal |
| Uscale\_1\_9 | Pre-test Understanding scale item: How much you can make sense of the topic's issues. 1 = very little, 7 = a great deal |
| Uscale\_1\_10 | Pre-test Understanding scale item: How clear the relationships between your ideas about the topic are. 1 = very little, 7 = a great deal |
| Uscale\_1\_11 | Pre-test Understanding scale item: How well you comprehend the topic’s issues. 1 = very little, 7 = a great deal |
| Uscale\_1\_12 | Pre-test Understanding scale item: How well-ordered your thoughts about the topic are. 1 = very little, 7 = a great deal |
| Uscale\_2\_1 | Post-test Understanding scale item: Knowledge about the topic. 1 = very little, 7 = a great deal |
| Uscale\_2\_2 | Post-test Understanding scale item: How well you understand the topic. 1 = very little, 7 = a great deal |
| Uscale\_2\_3 | Post-test Understanding scale item: How organised your thoughts about the topic are. 1 = very little, 7 = a great deal |
| Uscale\_2\_4 | Post-test Understanding scale item: How well you could explain the topic. 1 = very little, 7 = a great deal |
| Uscale\_2\_5 | Post-test Understanding scale item: How clear your thoughts about the topic are. 1 = very little, 7 = a great deal |
| Uscale\_2\_6 | Post-test Understanding scale item: How clear your interpretation of the topic is. 1 = very little, 7 = a great deal |
| Uscale\_2\_7 | Post-test Understanding scale item: How coherent your thoughts about the topic are. 1 = very little, 7 = a great deal |
| Uscale\_2\_8 | Post-test Understanding scale item: How structured your thoughts about the topic are. 1 = very little, 7 = a great deal |
| Uscale\_2\_9 | Post-test Understanding scale item: How much you can make sense of the topic's issues. 1 = very little, 7 = a great deal |
| Uscale\_2\_10 | Post-test Understanding scale item: How clear the relationships between your ideas about the topic are. 1 = very little, 7 = a great deal |
| Uscale\_2\_11 | Post-test Understanding scale item: How well you comprehend the topic’s issues. 1 = very little, 7 = a great deal |
| Uscale\_2\_12 | Post-test Understanding scale item: How well-ordered your thoughts about the topic are. 1 = very little, 7 = a great deal |
| Q1 | Writing Beliefs Inventory item: Good writing involves expressing a distinctive point of view. 1 = strongly agree and 5 = strongly disagree |
| Q2 | Writing Beliefs Inventory item: A good writer makes sure they know what they think before they start to write. 1 = strongly agree and 5 = strongly disagree |
| Q3 | Writing Beliefs Inventory item: The key to successful writing is to stick to one's plan. 1 = strongly agree and 5 = strongly disagree |
| Q4 | Writing Beliefs Inventory item: Good writers anticipate and answer their audience's questions. 1 = strongly agree and 5 = strongly disagree |
| Q5 | Writing Beliefs Inventory item: The key to good writing is revising. 1 = strongly agree and 5 = strongly disagree |
| Q6 | Writing Beliefs Inventory item: It's important to keep your overall purpose in mind while writing. 1 = strongly agree and 5 = strongly disagree |
| Q7 | Writing Beliefs Inventory item: Writing is a process involving a lot of emotion. 1 = strongly agree and 5 = strongly disagree |
| Q8 | Writing Beliefs Inventory item: Writing is primarily about transmitting information. 1 = strongly agree and 5 = strongly disagree |
| Q9 | Writing Beliefs Inventory item: Writers need to immerse themselves in their writing. 1 = strongly agree and 5 = strongly disagree |
| Q10 | Writing Beliefs Inventory item: Writing helps me understand better what I'm thinking about. 1 = strongly agree and 5 = strongly disagree |
| Q11 | Writing Beliefs Inventory item: Good writing requires making a detailed outline before writing. 1 = strongly agree and 5 = strongly disagree |
| Q12 | Writing Beliefs Inventory item: Writing is often an emotional experience. 1 = strongly agree and 5 = strongly disagree |
| Q13 | Writing Beliefs Inventory item: The key to successful writing is accurately reporting what authorities think. 1 = strongly agree and 5 = strongly disagree |
| Q14 | Writing Beliefs Inventory item: Good writers thoroughly explain their opinions and findings. 1 = strongly agree and 5 = strongly disagree |
| Q15 | Writing Beliefs Inventory item: Good writing involves getting each sentence right before moving on to the next. 1 = strongly agree and 5 = strongly disagree |
| Q16 | Writing Beliefs Inventory item: Writing's main purpose is to share the information in sources accurately. 1 = strongly agree and 5 = strongly disagree |
| Q17 | Writing Beliefs Inventory item: Writing helps me see the complexity of ideas. 1 = strongly agree and 5 = strongly disagree |
| Q18 | Writing Beliefs Inventory item: Revising involves reorganising the structure of the text. 1 = strongly agree and 5 = strongly disagree |
| Q19 | Writing Beliefs Inventory item: My thoughts and ideas become clearer to me as I write and rewrite. 1 = strongly agree and 5 = strongly disagree |
| Q20 | Writing Beliefs Inventory item: A primary goal of writing should be to have to make as few changes as possible. (REVERSE CODED) |
| Q21 | Writing Beliefs Inventory item: Good writing involves editing many times. 1 = strongly agree and 5 = strongly disagree |
| Q22 | Writing Beliefs Inventory item: Writing is a process of reviewing, revising, and rethinking. 1 = strongly agree and 5 = strongly disagree |
| Q23 | Writing Beliefs Inventory item: Revision is a multi-stage process. 1 = strongly agree and 5 = strongly disagree |
| Q24 | Writing Beliefs Inventory item: It is important for writers to get their ideas straight before they start to write. 1 = strongly agree and 5 = strongly disagree |
| Q25 | Writing Beliefs Inventory item: The most important reason to write is to report what authorities think about a subject. 1 = strongly agree and 5 = strongly disagree |
| Q26 | Writing Beliefs Inventory item: Good writers try to be objective. 1 = strongly agree and 5 = strongly disagree |
| Q27 | Writing Beliefs Inventory item: Writing's main purpose it to give other people information. 1 = strongly agree and 5 = strongly disagree |
| Q28 | Writing Beliefs Inventory item: When writing, it's best to use proven formats and templates, and then fill in the important information. 1 = strongly agree and 5 = strongly disagree |
| Q29 | Writing Beliefs Inventory item: Good writing involves developing ideas over a series of drafts. 1 = strongly agree and 5 = strongly disagree |
| Q30 | Writing Beliefs Inventory item: It is important to develop a distinctive writing style. 1 = strongly agree and 5 = strongly disagree |
| Q31 | Writing Beliefs Inventory item: The key to successful writing is making a well-organised plan. 1 = strongly agree and 5 = strongly disagree |
| Q32 | Writing Beliefs Inventory item: Good writers include a lot of quotes from authorities in their writing. 1 = strongly agree and 5 = strongly disagree |
| Q33 | Writing requires going back over it to improve what has been written. 1 = strongly agree and 5 = strongly disagree |
| Q34 | Writing Beliefs Inventory item: The key to good writing is conveying information clearly. 1 = strongly agree and 5 = strongly disagree |
| Q35 | Writing Beliefs Inventory item: It is important to thoroughly revise initial drafts of text. 1 = strongly agree and 5 = strongly disagree |
| Q36 | Writing Beliefs Inventory item: Writing should involve a personal interpretation of content. 1 = strongly agree and 5 = strongly disagree |
| Q37 | Writing Beliefs Inventory item: Writing should focus on the information in books and articles. 1 = strongly agree and 5 = strongly disagree |
| Q38 | Writing Beliefs Inventory item: Writing helps new ideas emerge. 1 = strongly agree and 5 = strongly disagree |
| Q39 | Writing Beliefs Inventory item: Good writers keep their audience in mind. 1 = strongly agree and 5 = strongly disagree |
| Q40 | Writing Beliefs Inventory item: Thorough planning is the most important aspect of writing. 1 = strongly agree and 5 = strongly disagree |
| Q41 | Writing Beliefs Inventory item: Good writers adapt their message to their readers. 1 = strongly agree and 5 = strongly disagree |
| Q42 | Writing Beliefs Inventory item: Good writers are reader-friendly. 1 = strongly agree and 5 = strongly disagree |
| Q43 | Writing Beliefs Inventory item: It's important to select the words that suit your purpose, audience, and occasion. 1 = strongly agree and 5 = strongly disagree |