Supplementary Material for: Typing Less, Saying More? – The Effects of Using Generative AI in Online Review Writing

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Appendix A: Variables of the Online Experiment

A1. Main Variable

1. Cognitive Load (*Likert Scale: 1 = Low to 7 = High*)

Item	
How much mental and perceptual activity was required to write the review (e.g., thinking, deciding, calculating, etc.)?	Adapted from Hart & Staveland, 1988

A2. Control Variables

1. Familiarity with Writing Reviews (Dropdown)

Itama	4

How often do you write online reviews?

Answers:

- Daily
- Weekly
- Monthly
- Quarterly
- Yearly
- Less than yearly
- Never

2. Familiarity with Reading Reviews (*Likert Scale: 1 = Strongly Disagree to 7 = Strongly Agree*)

Items

I read online consumer review frequently.

Adapted from Lee et al. 2012

Adapted from

Habla et al. 2024

3. Time Last Visit (Dropdown)

Items

When did you last visit an Mexican restaurant?

Answers:

- Within the last week
- Within the last 2 weeks
- Within the last month
- Within the last 3 months
- Within the last 6 months
- More than 6 months ago

Developed for this study

4. Prior AI Usage (Dropdown)

Items

Prior Use of Assistive Technology in Writing

Answers:

Adapted from Dhillon et al. 2024

- No
- Basic Usage
- Advanced Writing Assistants

5. Attitude Toward Writing (Likert Scale: 1 = Strongly Disagree to 7 = Strongly Agree)

Items

I give a lot of detail when writing.

I plan out my writing and stick with the plan.

Adapted from Graham et al. 2017

I enjoy writing. Writing is fun.

Cronbach's alpha = 0.80

6. Sociodemographic Questions

Items

Age Data provided from Sex Prolific

Appendix B: Descriptive Statistics

	Treatment Group $(n = 43)$			Control Group $(n = 42)$				- D:cc	Overall $(n = 85)$				
	Mean	SD	Min	Max	Mean	SD	Min	Max	Difference in Means	Mean	SD	Min	Max
Main Variables													
Cognitive Load (H1)	2,56	1,45	1,00	7,00	3,50	1,45	1,00	6,00	-0,94***	3,02	1,52	1,00	7,00
Number of Aspects (H2)	4,37	1,45	2,00	8,00	2,60	1,17	1,00	6,00	1,78***	3,49	1,59	1,00	8,00
Number of Topics (H2)	2,56	0,77	1,00	5,00	1,79	0,72	1,00	3,00	0,77***	2,18	0,83	1,00	5,00
Further Measures													
Number of Aspects GenAI Input	4,42	1,87	1,00	11,00	-	-	-	-	-	-	-	-	-
Linguistic Complexity	15,88	1,37	12,17	18,67	10,02	3,96	1,60	28,35	5,86***	12,99	4,15	1,60	28,35
Sentiment	0,92	0,28	-0,76	0,99	0,61	0,52	-0,78	0,99	0,31***	0,76	0,44	-0,78	0,99
Star Rating	4,28	0,73	2,00	5,00	4,19	0,99	1,00	5,00	0,09	4,24	0,87	1,00	5,00
Control Variables													
Familiarity with Writing Reviews	4,26	1,69	1,00	7,00	3,69	1,42	2,00	7,00	0,57	3,98	1,58	1,00	7,00
Familiarity with Reading Reviews	5,58	1,42	2,00	7,00	5,62	1,10	3,00	7,00	-0,04	5,60	1,26	2,00	7,00
Time Last Visit	2,49	1,24	1,00	6,00	3,14	1,65	1,00	6,00	-0,65	2,81	1,48	1,00	6,00
Prior AI Usage	1,93	0,55	1,00	3,00	1,76	0,66	1,00	3,00	0,17	1,85	0,61	1,00	3,00
Attitude Toward Writing	4,75	1,00	2,75	6,50	4,85	1,18	2,00	7,00	-0,10	4,80	1,09	2,00	7,00
Age	38,79	10,98	19,00	64,00	39,36	13,34	19,00	73,00	-0,57	39,07	12,13	19,00	73,00
Sex	1,37	0,49	1,00	2,00	1,24	0,43	1,00	2,00	0,13	1,31	0,46	1,00	2,00

^{***} p<0.01, ** p<0.05, * p<0.1. Statistical significance for differences between our experimental groups are based on a one-sided t-test (Number of Aspects, Number of Topics, Linguistic Complexity, Sentiment, Star Rating), a two-sided t-test (Age), a Wilcoxon rank-sum test for (Cognitive Load, Familiarity with Reading Reviews, Attitude Toward Writing), and Chi-Square test (Familiarity of Writing Reviews, Time Last Visit, Prior AI Usage, Sex (1 = Female, 2 = Male)).

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