

Background Factors of ESL Students and Preference of Computer- or Paper-based Writing Medium

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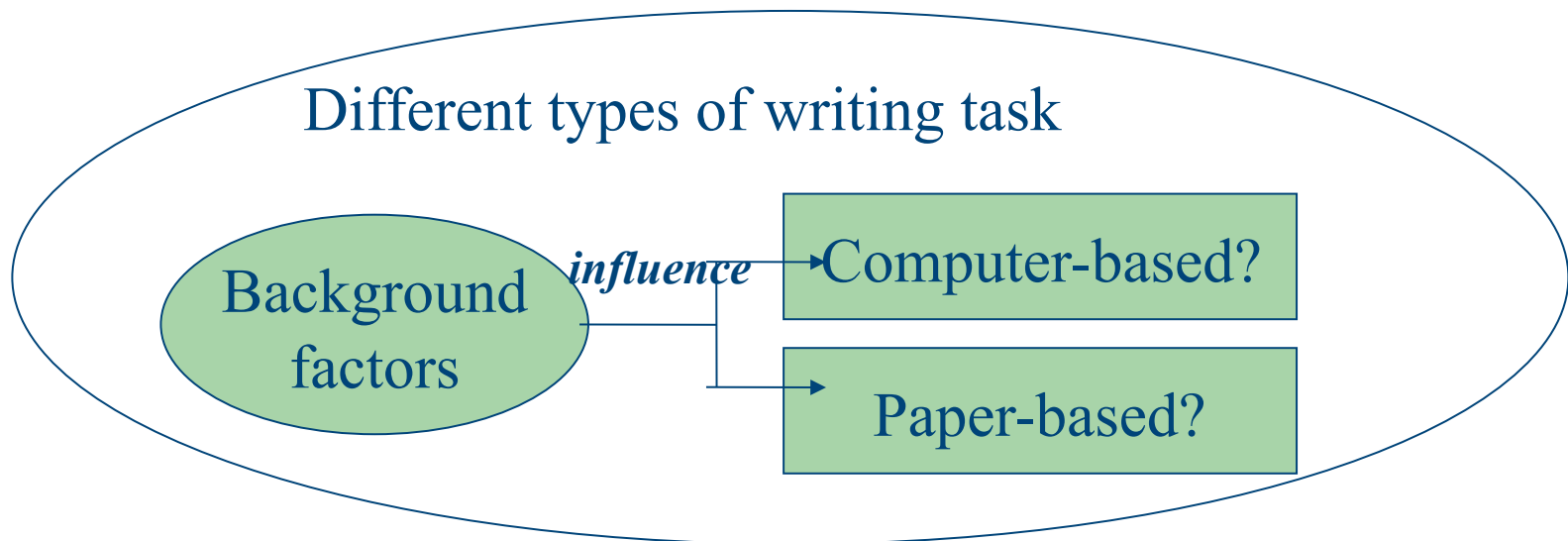
Problem Statement

Computers as a double-edged sword in education:

- Potentials and new possibilities
- Unintended negative consequences
 - Age
 - Gender
 - cultural background
 - prior experience
 - anxiety

Research Question

For ESL students, what background factors may influence their preference of either a computer- or a paper-based writing medium for different types of writing task?



Research Question (cntd)

Background factors:

- age
- gender
- native language
- English proficiency
- computer anxiety
- computer experience
- writing apprehension

Types of Writing task:

- short essay
- longer final-term paper
- timed writing test

Participants

153 EAP students

- age: 18 - 44
- proficiency levels: II – V
- 31 different countries
- 17 different L1s

Instrument

Questionnaire combining existing instruments and researchers' own design:

- demographic information (age, gender, native language)
- Class level (English proficiency)
- computer anxiety
- computer experience
- writing apprehension



L1s were categorized into three groups for data analysis:

- Indo-European group -
Italian, Spanish, Portuguese, Russian, French, Greek, Catalan, & Gujarati
- Afro-Asiatic group -
Arabic, Somali, & Turkish
- Asian group -
Chinese, Korean, Japanese, Tagalog, Thai, & Vietnamese

Instrument (cnt'd)

Preference of writing medium
in completing three hypothetical writing tasks

	Computer	Paper
A short essay for an ESL class (For example, a 100-word essay about your first day in the U.S.A.)		
A final-term paper for a university-level class (For example, a 10-page paper on a topic in your major.)		
A timed writing test (For example, a 30-minute essay for TOEFL.)		

Data Analysis

- Logistic regression (for dichotomous DV)
- First, all 7 background factors considered
- Then, backward selection to eliminate non-significant factors

Results - Descriptive

<i>Writing Task</i>	Preference	Frequency	Per cent
Type I: Short essay writing assignment for ESL class	Computer Paper	121 25	83 17
Type II: Longer final term paper for university academic class	Computer Paper	116 31	79 21
Type III: Timed writing test such as Test of Written English (TWE) in TOEFL	Computer Paper	104 42	71 29

Results – logistic regression

<i>Types of Writing Task</i>	<i>Significant factors</i>
A short essay for an ESL class (For example, a 100-word essay about your first day in the U.S.A.)	<i>Computer anxiety</i>
A final-term paper for a university-level class (For example, a 10-page paper on a topic in your major.)	none
A timed writing test (For example, a 30-minute essay for TOEFL.)	<i>English proficiency</i>

Results – other findings

- For each type of the task, > 70% indicated preference of computer-based medium
- Percentage of computer preference decreased from Type I - III

Discussion

Why different results for different types of task?

- Level of stress involved for each type
- Level of cognitive demanding

Conclusion

- age, gender, cultural background, computer experience, & writing apprehension – not significant in any of the three types of writing task
- computer anxiety & English proficiency – pending on the context (e.g. type of the task)

Limitations & Future Research

- Self-reported data, no triangulation
Future research: think-aloud protocol or follow-up interview
- Hypothetical preference
Future research: choice in completing the real tasks

Selected References

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Questions & Comments?

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Thank you!