

Exploring the effects of self-efficacy on
lexical sophistication in writing and strategies
for productive vocabulary use

WANG Jingyuan & MIZUMOTO Atsushi

Kansai University, Japan

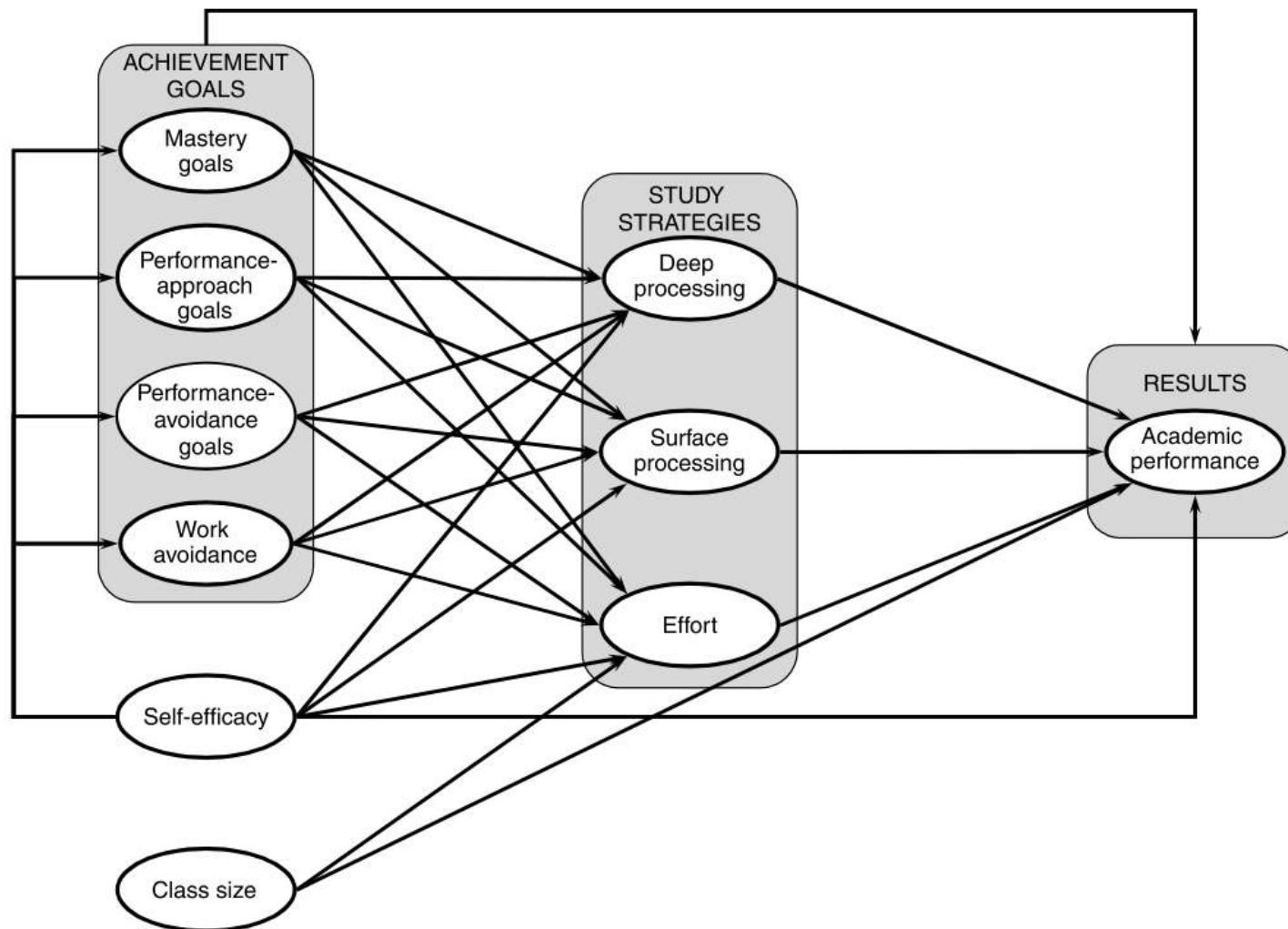


SELF-EFFICACY

- **Definition:** **Self-efficacy** is a person's belief in their own capabilities and the ability to attain specific goals (Bandura, 1977).

SELF-EFFICACY & VOCABULARY LEARNING STRATEGIES

- Bandura (1977, 1986) conceptualized **self-efficacy** to be an influential predictor of students' learning achievement, but he also suggested that this relationship might be mediated through some other human mechanisms.
- According to Fenollar et al. (2007), **self-efficacy** is predicted to have an indirect effect on the academic performance through learning strategies which have a direct effect on academic performance.



(Fenollar et al., 2007)

SELF-EFFICACY & VOCABULARY LEARNING STRATEGIES

- Therefore, Mizumoto (2012) did a study to explore the effects of self-efficacy on vocabulary learning strategies.
- In this research, **The Vocabulary Size Test** (Nation & Beglar, 2007) was used to measure the participants' vocabulary size. And an open-ended questionnaire was used to explore the VLSs that participants used.

First 1000

1. see: They **saw** it.
 - a. 切った
 - b. 待った
 - c. 見た
 - d. 始めた

2. time: They have a lot of **time**.
 - a. お金
 - b. 食べ物
 - c. 時間
 - d. 友だち

3. period: It was a difficult **period**.
 - a. 質問
 - b. 期間
 - c. すべきこと
 - d. 本

4. figure: Is this the right **figure**?
 - a. 答え
 - b. 場所
 - c. 時間
 - d. 数字

8. shoe: Where is your **shoe**?
 - a. 親
 - b. 財布
 - c. ペン
 - d. くつ

9. standard: Her **standards** are very high.
 - a. かかと
 - b. 成績
 - c. 費用
 - d. 基準

10. basis: This was used as the **basis**.
 - a. 解答
 - b. 休憩場所
 - c. 次の一步
 - d. 主要な部分

Second 1000

1. maintain: Can they **maintain** it?
 - a. 維持する
 - b. 拡大する
 - c. 改良する
 - d. 入手する

■ The Vocabulary Size Test

■ (Nation & Beglar, 2007)

FROM THE PRODUCTIVE POINT OF VIEW:

- Three dimensions of vocabulary knowledge development were put forward by Henriksen (1999):
 - A. *partial to precise knowledge*
 - B. *depth of knowledge*
 - C. *receptive to productive use ability*

- *Converting receptive vocabulary into productive vocabulary* is the final stage of vocabulary learning (Brown & Payne, 1994).

↓
- How do self-efficacy influence the achievement of vocabulary use in writing?

LEXICAL SOPHISTICATION

- Learner's productively lexical richness (achievement) in writing can be demonstrated by some indices.
- For example:
 - lexical originality (LO); lexical density (LD);
 - lexical variation (LV); **lexical sophistication (LS)** etc...

LEXICAL SOPHISTICATION

- According to Laufer & Nation (1995), **lexical sophistication (LS)** = Number of advanced tokens/ Total number of lexical tokens. Although what is labelled as "advanced" would depend on the researcher's definition.



- **Lexical sophistication** involves both the *depth* and *breadth* of lexical knowledge available to speakers, readers, and writers (Meara, 1996, 2005a).



LEXICAL SOPHISTICATION

- **Lexical sophistication** is an important predictor of holistic scores of writing proficiency with regard to independent writing tasks (Kyle & Crossley, 2016).



- **Lexical sophistication** is measured in this research as the productive ability (achievement in vocabulary use).

■ **RQ1: What is the effect of self-efficacy on lexical sophistication in writing?**

■ **RQ2: What is the effect of self-efficacy on strategies for vocabulary use in writing?**

METHOD

1. Participants:

- 70 non-English-major sophomores from two universities in the northeast of China
- 23 male and 47 female students
- 19 ~ 21 years old
- 38 basic users, 27 independent users, 5 proficient users

METHOD

2. Instruments

(1) Independent writing from CET-4 (College English Test Band 4):

Directions: For this part, you are allowed 30 minutes to write a short essay on the challenges of living in a big city. You should write at least 120 words but no more than 180 words.

(2) A six-point scale questionnaire on self-efficacy based on Faraj's (2015) Questionnaire for EFL Writing (Appendix A)

Alpha = .95

METHOD

2. Instruments

(3) An open-ended questionnaire on **productive vocabulary** use strategies (Appendix B) based on

- Gu's (2018) Vocabulary Learning Questionnaire (Version 6.4)

- Teng & Zhang's (2016) Writing Strategies for Self-Regulated Learning Questionnaires

METHOD

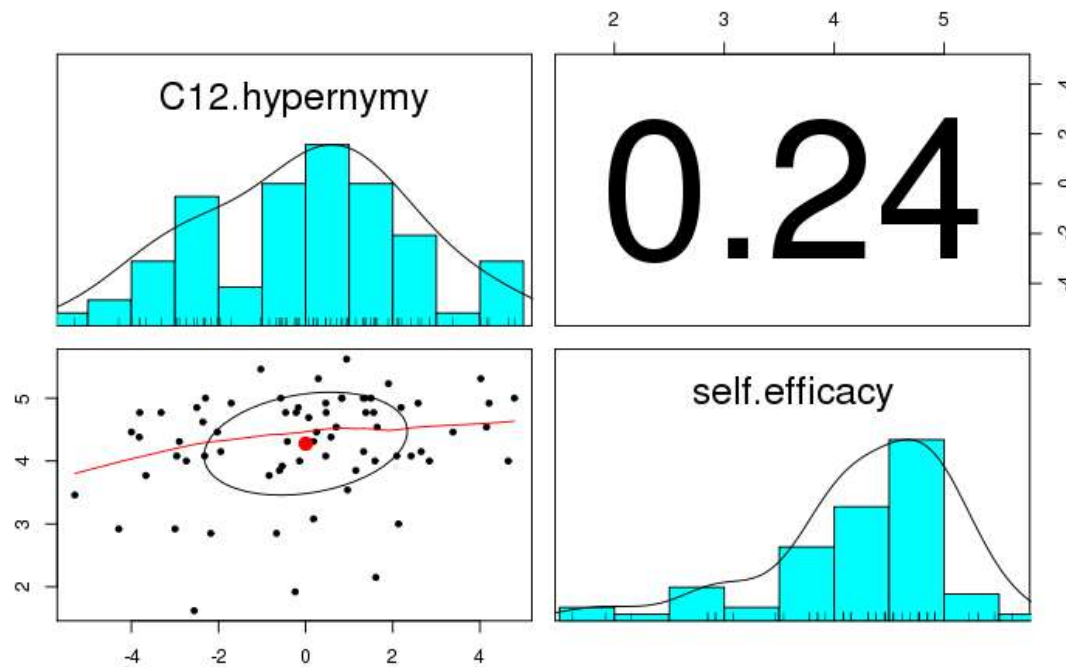
3. Measurement of lexical sophistication

(1) TAALES 2.8.1 (Kyle & Crossley, 2018)

(2) Human rating of lexical sophistication (resource) based on rating descriptors of IELTS writing task (0~9)

Kappa = .75

RESULT RQ1: What is the effect of self-efficacy on lexical sophistication in writing?

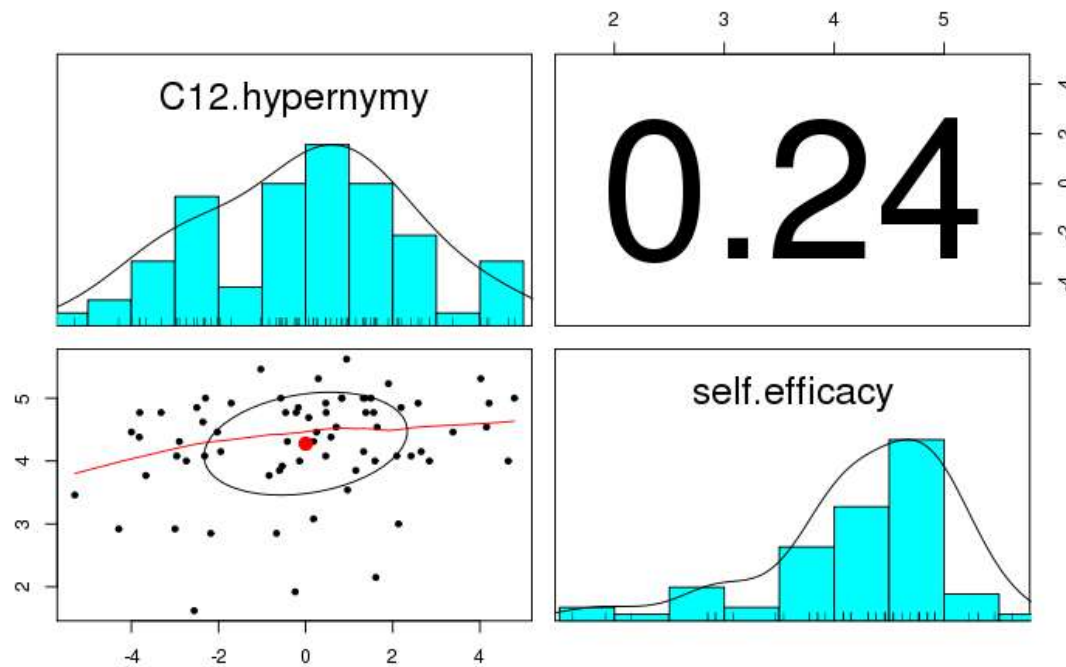


Alpha = .95

RESULT **RQ1**: What is the effect of self-efficacy on lexical sophistication in writing?

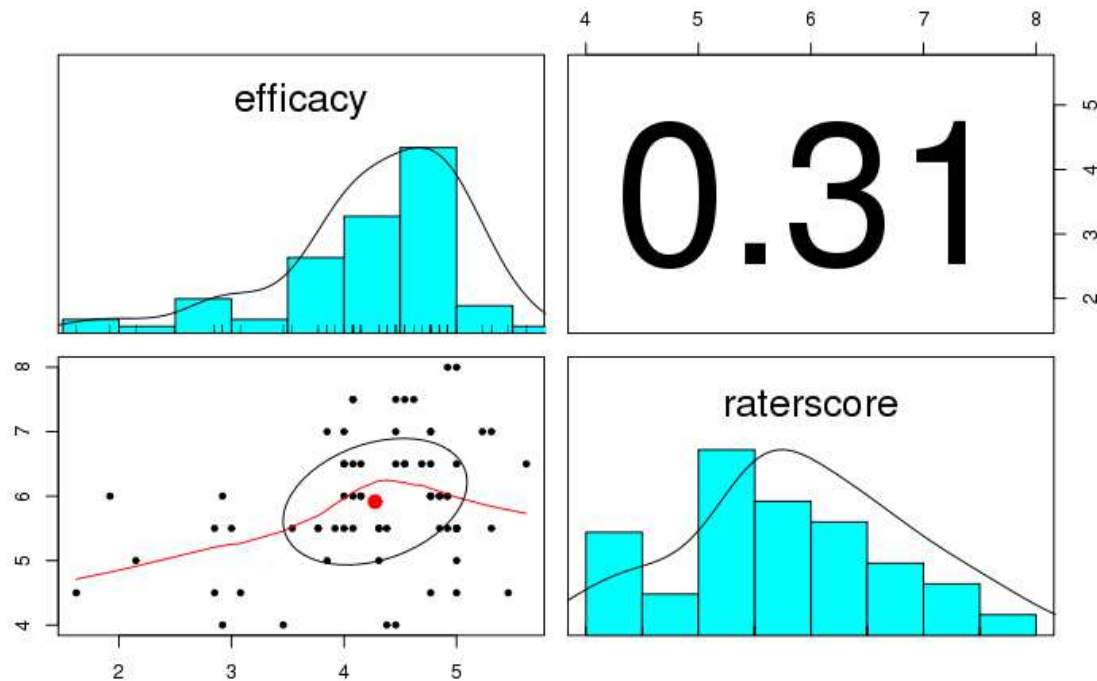
- **Hypernymy** stands for the degree of word specificity in a semantic hierarchy (Kyle & Crossley, 2017).
- For example:
tree (**hypernym**): oak, pine etc. (**hyponym**)

RESULT RQ1: What is the effect of self-efficacy on lexical sophistication in writing?



Alpha = .95

RESULT RQ1: What is the effect of self-efficacy on lexical sophistication in writing?



Kappa = .75

RESULT **RQ1**: What is the effect of self-efficacy on lexical sophistication in writing?

- One example of writing compositions:

Challenges is so important that it exists everywhere around us in the big city. There are so many chances and challenges but not everyone can seize the precious chance. Some people will complain that the high price in the big city prohibit them to live in the big city. But I think if you really work hard, it is not a problem. Some people just leave the big city because they can not tackle their pressure. Although there are many other challenges in the big city like traffic congestion, air pollution and so forth. I think we can overcome them by taking actions not by complaining about. In my opinion challenges are the same as chances, even more important because it can reinforce our abilities and make us persevere ahead.

RESULT **RQ1**: What is the effect of self-efficacy on lexical sophistication in writing?

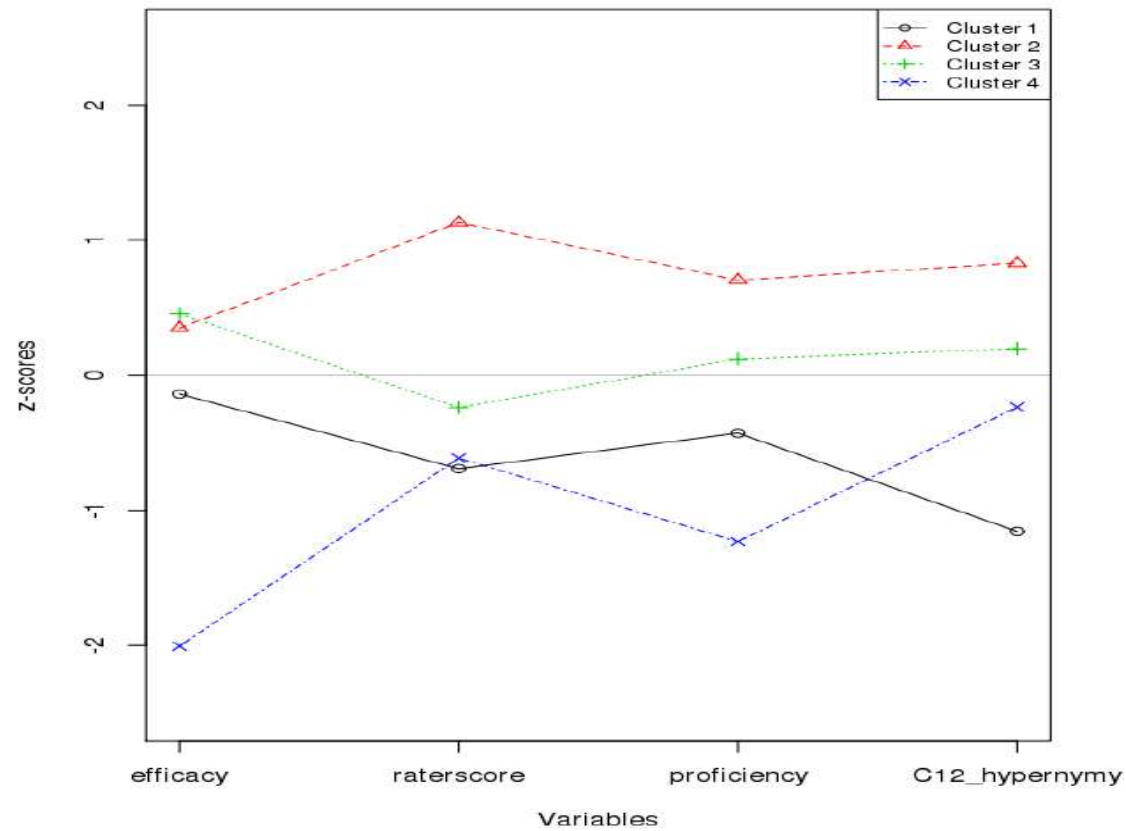
- The other one example of writing compositions:

I really do not want to live in the big city. I need to do happy things in the big city very much. Sometimes, I can't to doing some my favourite things. Because, I am not at home. In the big city, I am very tired and sad .my rest's time is very less. I don't like the big city. The big city have many challenges of living for me. I must work and study hard to **overcome** it. Or I can not **afford** a house in the big city because the price of the big city are very high and high. Or else, my health maybe can get too bad because in the big city of their bad **air pollution**. In a word, I really do not like living in the big city.

RESULTS

RQ2: What is the effect of self-efficacy on strategies for vocabulary use in writing?

- Cluster analysis:



RESULTS

■ RQ2: What is the effect of self-efficacy on strategies for vocabulary use in writing?

■ Thematic analysis:

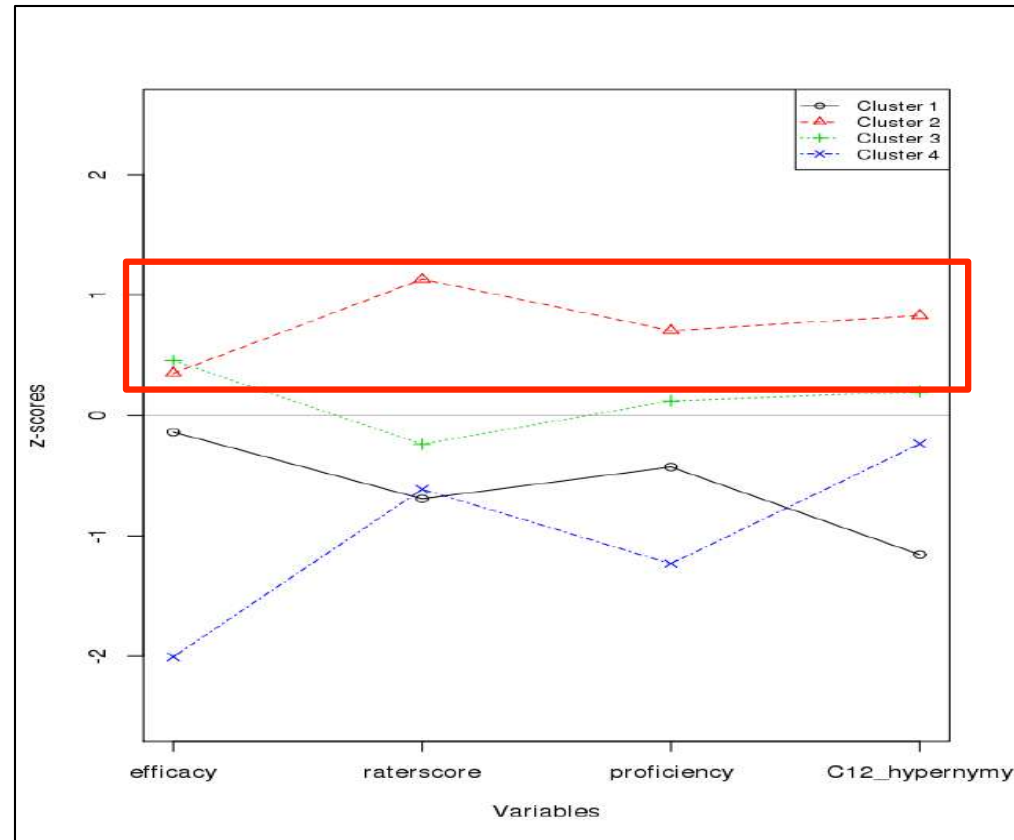
	cluster1	cluster2	cluster3	cluster4
Q 22. How do you select your attention to the words? (metacognitive strategies selective attention)				
According to the frequency	▲	√	√	×
According to the test	▲	▲	▲	×
According to the interest	×	▲	×	×
Q 33. How do you regulate yourself to learn and use the words? (metacognitive strategies)				
Self-initiation (learning)	▲	√	√	▲
Motivation (test)	√	▲	√	√
Motivation (interest)	×	▲	×	×
Goalsetting	√	√	√	×
Q 44. How do you use the dictionary? (Dictionary strategies)				
pay attention to the examples and usages.	√	√	√	×
Q 55. How do you take notes? (Taking notes)				
I make a note when I see a useful expression or phrase or collocation.	√	√	√	▲
I note down examples showing the usages of the word I look up.	√	√	√	▲
Q 66. How do you rehearse the words that you have learnt? (Rehearsal)				
I make regular reviews of new words I have memorized and their usage.	▲	√	√	▲
When I try to remember a word, I write it and its Chinese meanings again and again.	√	×	√	√
I review the words by using the words.	▲	√	▲	×
Q 77. How do you activate the words that you've learnt? (Activate)				
I make up my own sentences using the words I just learned.	▲	▲	▲	×
I try to use the newly learned words as much as possible in writing.	√	√	√	×
I try to use newly learned words in real situations.	▲	√	√	▲

RESULTS

■ RQ2: What is the effect of self-efficacy on strategies for vocabulary use in writing?

Cluster 2 ($n = 20$):

- Interest-driven
- Less test-driven
- Less rote learning
- Always regularly using learned words
- High self-initiation

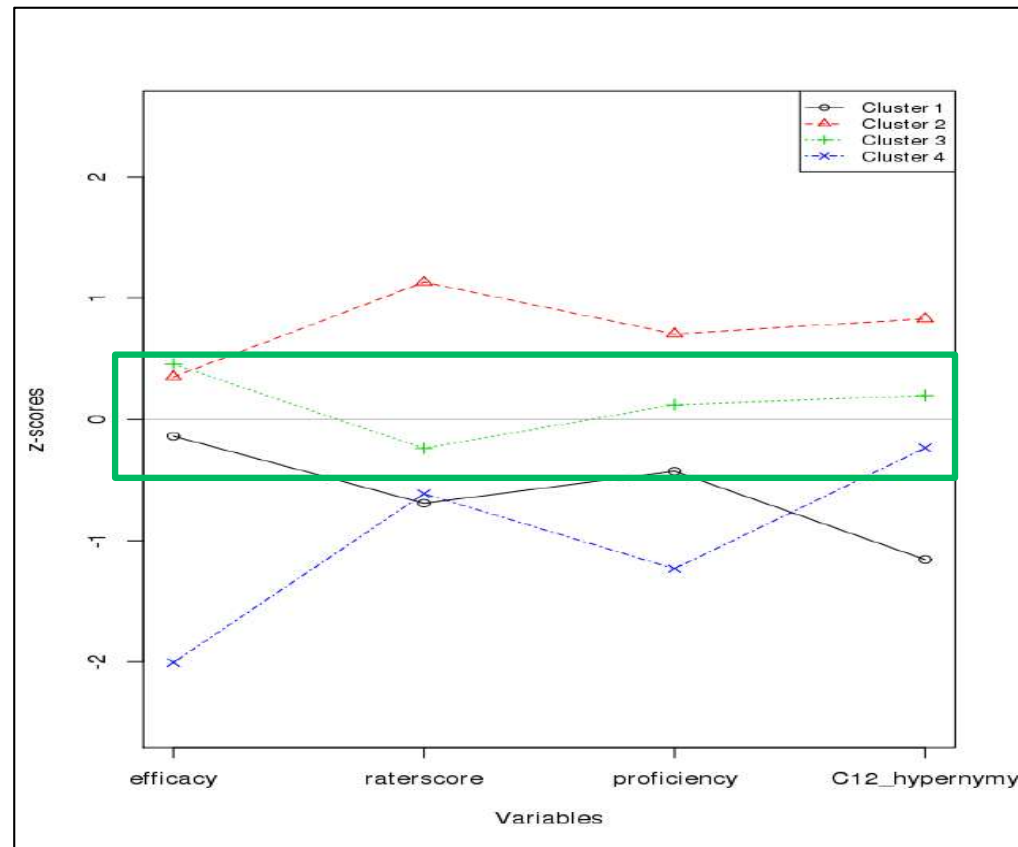


RESULTS

■ RQ2: What is the effect of self-efficacy on strategies for vocabulary use in writing?

Cluster 3 ($n = 25$):

- Not interest-driven
- Test-driven
- Rote learning
- Sometimes using learned words
- High self-initiation

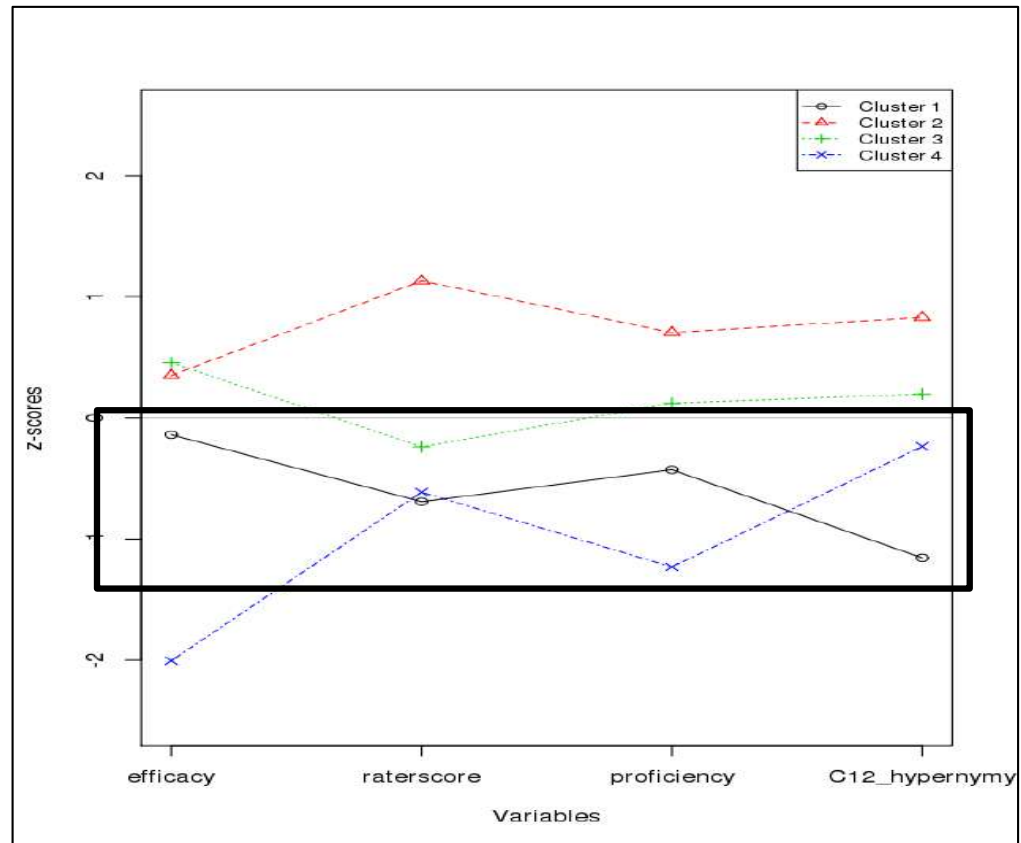


RESULTS

■ RQ2: What is the effect of self-efficacy on strategies for vocabulary use in writing?

Cluster 1 ($n = 17$):

- Not interest-driven
- Test-driven
- Rote learning
- Sometimes using learned words
- Low self-initiation

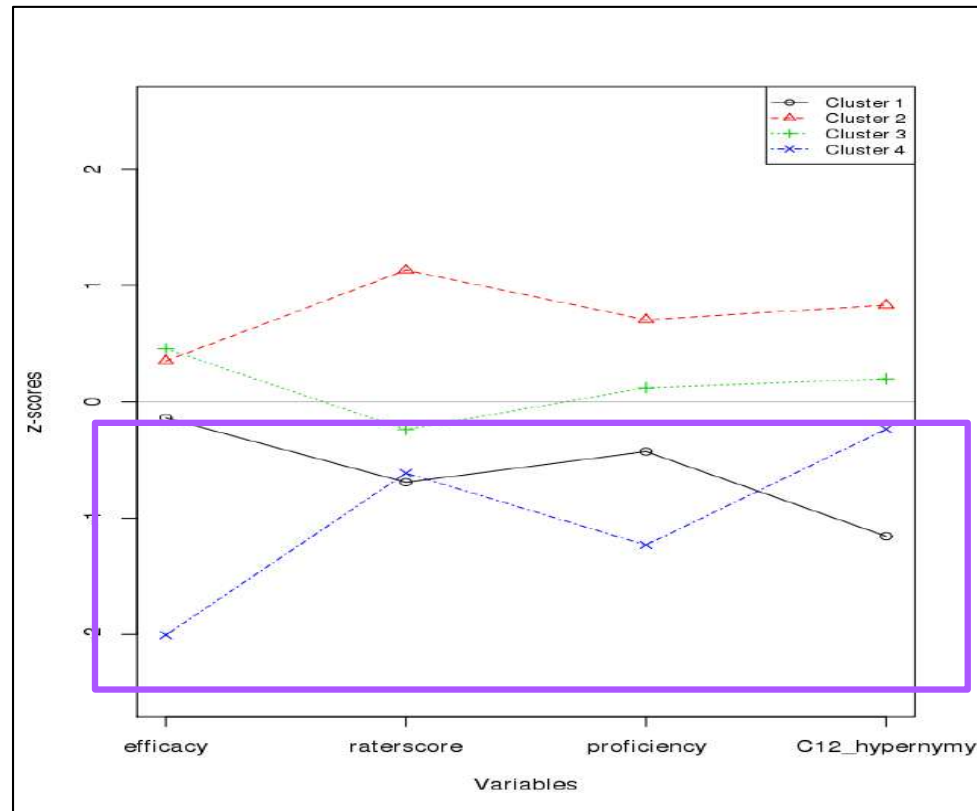


RESULTS

■ RQ2: What is the effect of self-efficacy on strategies for vocabulary use in writing?

Cluster 4 ($n = 8$):

- Not interest-driven
- Test-driven
- Rote learning
- Hardly using learned words
- Low self-initiation



CONCLUSION

- Self-efficacy enhancement may be an influential factor in vocabulary using, especially **hyponym using** from the perspective of lexical sophistication.
- Higher self-efficacy may lead to a flexible strategy using (not rote learning).
- Higher self-efficacy may lead to a more regular vocabulary using.
- Self-efficacy may be an important factor in metacognitive strategy using.
Self-initiation may be an important factor in productive vocabulary using.
Motivation may also be an important factor in productive vocabulary using (interest-driven vs. test driven).

Q & A

Mail :
icewings2015@outlook.com

REFERENCES :

- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Brown, C., & Payne, M. E. (1994). *Five essential steps of processes in vocabulary Learning*. Paper presented at the TESOL Convention, Baltimore, Md.
- Faraj, A. K. A. . (2015). Effective strategies for turning receptive vocabulary into productive vocabulary in efl context. *Journal of Education & Practice*, 6(27), 10-19.
- Fenollar, P., Roman, S., & Cuestas, P. J. (2007). University students' academic performance: An integrative conceptual framework and empirical analysis. *British Journal of Educational Psychology*, 77(4), 873-891.

REFERENCES :

- Gu, P. Y. (2018). Validation of an online questionnaire of vocabulary learning strategies for ESL learners. *Studies in Second Language Learning and Teaching*, 8(2), 320-335.
- Henriksen, B. (1999). Three dimensions of vocabulary development. *Studies in Second Language Acquisition* 21(2), 303-317.
- Kim, M. , Crossley, S. A. , & Kyle, K. . (2017). Lexical sophistication as a multidimensional phenomenon: relations to second language lexical proficiency, development, and writing quality. *The Modern Language Journal*, 102(1), 120-141.
- Kyle, K. , & Crossley, S. . (2016). The relationship between lexical sophistication and independent and source-based writing. *Journal of Second Language Writing*, 34, 12-24.

REFERENCES :

- Laufer, B. , & Nation, P. . (1995). Vocabulary size and use: lexical richness in 12 written production. *Applied Linguistics*, 16(3), 307-322.
- Meara, P. (1996). The dimensions of lexical competence. In G. Brown, K. Malmkjaer & J. Williams (Eds.), *Performance and competence in second language acquisition* (pp. 35–53). Cambridge, England: Cambridge University Press.
- Meara, P. (2005a). Designing vocabulary tests for English, Spanish and other languages. In C. Butler, S. Christopher, M. A. Gomez Gonzalez, & S. M. Doval Suarez (Eds.), *The dynamics of language use* (pp. 271–285). Amsterdam, the Netherlands: John Benjamins.

REFERENCES :

- Mizumoto, A. (2012). Exploring the effects of self-efficacy on vocabulary learning strategies. *Studies in Self-Access Learning Journal*, 3(4), 423-437.
- Nation, P., & Beglar, D. (2007). A vocabulary size test. *The Language Teacher*, 31(7), 9–13.
- Teng, L. S. , & Zhang, L. J. . (2016). A questionnaire-based validation of multidimensional models of self-regulated learning strategies. *The Modern Language Journal*, 100(3), 583-731.

APPENDI

- Faraj's (2015) Questionnaire for productive vocabulary.

I can pronounce the word correctly.	1	2	3	4	5
I can spell and write the word correctly.	1	2	3	4	5
I know the meaning of the word.	1	2	3	4	5
I can associate the word to my previous experience or someone close to me or a place etc. to be able to recall the word easily when I want use it.	1	2	3	4	5
I can effectively recall vocabulary items I have learned.	1	2	3	4	5
I can successfully use the vocabulary words that I learned to express my ideas.	1	2	3	4	5
I can successfully use the vocabulary knowledge I have got from dictionary and practice it in productive skills like speaking and writing.	1	2	3	4	5
I can use appropriate vocabulary and its forms to effectively in my speeches or writing with the reader or listener.	1	2	3	4	5
I can use the word in the grammatical patterns accurately.	1	2	3	4	5
I can use the word with appropriate collocations.	1	2	3	4	5
I can use the word's synonym and antonym accurately.	1	2	3	4	5
I can use the word at appropriate time.	1	2	3	4	5
I use the teacher's feedback to help me with English language skills especially (speaking and writing).	1	2	3	4	5

APPENDIX B

■ Open-ended questionnaire on productive vocabulary use strategies

Q1:What do you think of vocabulary using? (Beliefs about vocabulary using)

Q2:How do you select your attention to the words? (metacognitive strategies selective attention)

Q3:How do you regulate yourself to learn and use the words? (metacognitive strategies)

Q4:How do you use the dictionary? (Dictionary strategies)

Q5:How do you take notes? (Taking notes)

Q6:How do you rehearse the words that you have learnt? (Rehearsal)

Q7:How do you activate the words that you've learnt? (Activate)