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Learning strategies and motivation among procrastinators of various English proficiency levels

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Abstract. Our research project focuses on learning strategies and motivation among academic procrastinators in computer assisted language learning (CALL) settings. In this study, we aim to compare them according to students' levels of English proficiency. One hundred and fourteen university students participated in this research project. Sixty-four students determined to be procrastinators were the focus of this research, and we analyzed their learning strategies and motivation based on their English proficiency (i.e. TOEIC-IP scores). The students were categorized into four groups: under-300s (n=17), 400s (n=22), 500s (n=21), and over-600 (n=4). The learning strategies and motivation of the students were collected with a researcher-created 5-point Likert questionnaire consisting of 33 items. The group differences were discriminately analyzed for each item of the questionnaire. The results showed that students who think that the amount to be learned is too large and those who tire easily may ultimately have inefficient and ineffective learning results. The research findings should be significant for teachers and researchers attempting to discriminate between active and passive procrastinators in order to predict their performance and match them with suitable learning supports.

Keywords: procrastinator, learning strategies, motivation, English proficiency level.

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1. Introduction

The purpose of this research is to analyze and compare learning strategies and motivation among procrastinators of different English proficiency levels who are engaged in computer-assisted language learning (CALL). Thanks to the advancement of technology, the use of CALL designed to include in face-to-face instruction and outside-the-classroom e-learning has increased, and such blended education requires more self-regulated learning. In this research project, we focused on students' behavior while they were engaged in blended learning. Specifically, the characteristics of procrastinators were examined in connection with their English proficiency levels.

It is said that about 70% of university students are procrastinators (Schouwenburg, Lay, Pychyl, & Ferrari, 2004), and procrastination has been viewed as a negative factor in terms of academic success (e.g. Hussain & Sultan, 2010; Tan et al., 2008). Academic procrastination has often been viewed as being related to a lack of self-regulated learning (e.g. Wolters, 2003). However, procrastination may not always have negative effects on learning, and some procrastinators use procrastination intentionally as a result of their self-regulation.

Chu and Choi (2005) introduced the concept of active and passive procrastination. Passive procrastination is considered as non-purposeful academic postponing as a result of a lack of planning, motivation, attention, and self-regulation. Active procrastination, on the other hand, is an intentional decision to procrastinate and the ability to complete the assigned tasks by their deadlines because of strong motivation under time pressure. If students are active procrastinators, then they may not need much support from the instructor to complete their assignments and tasks by the deadlines. Our research project's goal is to categorize learners into types and to match the categories with the types of e-learning support they require.

In our previous research related to learning behavior types in CALL courses (Goda, Yamada, Matsuda, Kato, & Saito, 2013), seven learning behavior types were found: (1) procrastination, (2) learning habit, (3) random, (4) diminished drive, (5) early bird, (6) chevron, and (7) catch-up. When the learning types and their English proficiencies were compared, learning type (1) was significantly lower in terms of proficiency than learning type (2) (Type (1): N=145, M=432.48; Type (2): N=9, M=582.78). This implies that being in the learning habit category may lead to higher levels of English proficiency and that procrastinators may have inefficient and ineffective learning strategies. However, we assume that learning type (1) includes both active and passive procrastinators. In order to provide

effective learning support to individuals in CALL, the procrastinators should be categorized further and differentiated into a support-necessary group and a support-unnecessary group. Students with higher English proficiency levels were assumed to use procrastination intentionally as active procrastinators.

2. Method

2.1. Participants

In this research project, 114 undergraduate students who registered for a CALL course at a university in Japan during the spring semester of 2013 participated. Sixty-four students were categorized as having learning type (1), procrastination, and their learning strategies and motivation were analyzed based on their English proficiency levels. English proficiency was operationally defined as the TOEIC-IP score, and four groups were created based on students' TOEIC-IP score levels: under-300s, 400s, 500s, and over-600. There were 17, 22, 21, and 4 students in these groups, respectively.

2.2. Course description

The targeted CALL course was a one-credit mandatory class provided to sophomores at the university. The semester began in April and ended in July of 2013, and there were 15 lessons over the semester. As the main material for the course, Newton e-Learning (TLT training Soft/TOEIC®TEST) was employed to encourage students' self-paced mastery learning of English. Once a week, students were required to come to the classroom to have a face-to-face class and study the materials outside the classroom.

2.3. Data collection and analysis

The students' perceived learning strategies and motivation were obtained via a researcher-developed questionnaire. The questionnaire consisted of 33 5-point-Likert-scale items related to learning strategy and motivation. The items were selected and created based on three dimensions (cognitive, affective, and behavioral) of self-regulated learning (Wolters, 2003). The questionnaire included 16 cognitive and meta-cognitive, eleven affective, and six behavior and context items.

The questionnaire was implemented at the end of the first class, and the TOEIC-IP was conducted during the 9th week of the semester. The learning behavior types were categorized into seven groups using the method of Goda et al. (2013),

visualizing the learning progress from the beginning to the end of the semester. The descriptive statistics for learners' behavior types and TOEIC-IP scores were reported first. The students in the procrastination group were categorized into four groups (under-300s, 400s, 500s, and over-600). Then, the discriminant analyses were performed for the groups' questionnaire responses related to learning strategies and motivation.

3. Results

3.1. Descriptive statistics

The learning behaviors of the 114 students were categorized into seven types, (1) procrastination, (2) learning habit, (3) random, (4) diminished drive, (5) early bird, (6) chevron, and (7) catch-up, based on their actual learning progresses. The numbers of students in each category were 64, 6, 3, 12, 2, 11, and 8, respectively. There were eight students who studied too little, merely accessing the learning materials once and/or dropping out. They did not match any of the learning behavior types. Since the learning strategies and motivation of the procrastinators were the focus of this research, the 64 procrastinators' responses on the questionnaire were further analyzed.

The grand mean of all participants (N=114) on the TOEIC-IP was 486.71, and the mean of the 64 students in the procrastination group was 459.53. The procrastinators were further categorized into four groups based on their TOEIC-IP scores: under-300s (n=17), 400s (n=22), 500s (n=21), and over-600 (n=4). The means and standard deviations of each question item regarding the learning strategies were calculated based on the English proficiency groups. The results showed that the most extreme mean values (i.e. the highest mean among the four groups) were observed for the under-300s or over-600 groups.

3.2. Inferential statistics

The discriminant analyses of the four groups on all question items resulted in two significant items (Questions 15 and 25) and two marginally insignificant items (Questions 4 and 28) (Q4: $F_{(3,60)}$=2.544, p=.065, Q15: $F_{(3,60)}$=3.559, p=.019, Q25: $F_{(3,60)}$=4.718, p=.005, Q28: $F_{(3,60)}$=2.518, p=.067). Table 1 shows the results regarding significance and marginal insignificance on Tukey's post-hoc tests. Table 1 also provides the question items, mean differences, and probabilities. The under-300s group significantly differs from the 400s on the questions 15 and 25. This implies that students who think that the amount to learn is too great and tire easily

might ultimately have inefficient and ineffective learning results. To discriminate between the under-300s and the over-600 groups, Q28 might be useful.

Table 1. Significant results of post-hoc Tukey analyses

	Question	(I) TOEIC_ Level	(J) TOEIC_ Level	Mean Difference (I-J)	*S.E*	*p*	95% CI	
							Lower	Upper
Q4	I want to finish an assignment as soon as possible.	Under-300s	400s	-0.43	0.22	0.23	-1.02	0.16
			500s	-0.53†	0.23	0.10	-1.13	0.07
			Over-600	-0.79	0.39	0.18	-1.81	0.23
		400s	500s	-0.10	0.21	0.96	-0.66	0.46
			Over- 600	-0.36	0.38	0.77	-1.36	0.63
		500s	Over-600	-0.26	0.38	0.90	-1.26	0.74
Q15	The assigned amount of learning per day is too much to catch up.	Under-300s	400s	.733**	0.26	0.04	0.04	1.43
			500s	0.59	0.27	0.14	-0.12	1.29
			Over-600	-0.18	0.45	0.98	-1.38	1.02
		400s	500s	-0.15	0.25	0.94	-0.81	0.51
			Over-600	-0.91	0.44	0.18	-2.08	0.27
		500s	Over-600	-0.76	0.45	0.33	-1.94	0.42
Q25	I get tired easily.	Under-300s	400s	.880**	0.25	0.00	0.22	1.54
			500s	0.66*	0.25	0.05	0.00	1.33
			Over-600	0.97	0.43	0.12	-0.16	2.10
		400s	500s	-0.22	0.24	0.79	-0.84	0.40
			Over-600	0.09	0.42	1.00	-1.02	1.20
		500s	Over-600	0.31	0.42	0.88	-0.80	1.42
Q28	I don't feel rushed until the deadline is nearing.	Under-300s	400s	0.26	0.25	0.71	-0.39	0.91
			500s	0.07	0.25	0.99	-0.59	0.72
			Over-600	1.10*	0.42	0.05	-0.01	2.22
		400s	500s	-0.20	0.23	0.84	-0.81	0.42
			Over-600	0.84	0.41	0.19	-0.25	1.93
		500s	Over-600	1.04†	0.42	0.07	-0.06	2.13

Note. * $p < .05$, ** $p < .01$, †$p < .10$.

4. Discussion and conclusions

The results imply that among procrastinators, those who thought there was too much material to learn and those who easily became tired of things may ultimately have inefficient and ineffective learning. Those passive procrastinators need more support to help them control their cognitive, affective, and behavioral regulation within this context. In contrast, active procrastinators may feel rushed long before the deadline, although they do not concentrate their studies within the period just before the deadline. Because of the unease or tension caused by not studying early, active procrastinators may use learning strategies and motivation control to concentrate on the contents and learn them effectively. This tension may also play an important role in procrastination research.

In this research project, a researcher-developed questionnaire was used to collect data, and other questionnaires related to learning strategies and motivation should

be employed for data collection. TOEIC-IP scores were adopted to categorize the learners in terms of English proficiency, assuming that students with higher levels of proficiency would have better learning skills and more motivation and that this would be a useful way to separate active and passive procrastinators. This underlying assumption should be examined using different samples and contexts in future research.

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References

Chu, A. H. C., & Choi, J. N. (2005). Rethinking procrastination: Positive effects of "active" procrastination behavior on attitudes and performance. *The Journal of Social Psychology, 145*(3), 245-264. doi:10.3200/SOCP.145.3.245-264

Goda, Y., Yamada, M., Matsuda, T., Kato, H., & Saito, Y. (2013). e ラーニングにおける学習行動の分類 [Categorization of learning behavior in e-Learning] (pp. 867-868). *Proceedings of the 29th Annual Conference of JSET*.

Hussain, I., & Sultan, S. (2010). Analysis of procrastination among university students. *Procedia Social and Behavioral Sciences, 5*, 1897-1904. doi:10.1016/j.sbspro.2010.07.385

Schouwenburg, H. C., Lay, C., Pychyl, T. A., & Ferrari, J. R. (2004). *Counseling the procrastinator in academic settings*. Washington, D.C.: American Psychological Association. doi:10.1037/10808-000

Tan, C. X., Ang, R. P., Klassen, R. M., Yeo, L. S., Wong, I. Y. F., Huan, V. S., & Chong, W. H. (2008). Correlated of academic procrastination and students' grade goals. *Current Psychology, 27*(2), 135-144. doi:10.1007/s12144-008-9028-8.

Wolters, C. A. (2003). Understanding procrastination from a self-regulated learning perspective. *Journal of Educational Psychology, 95*(1), 179-187. doi:10.1037/0022-0663.95.1.179