LEARNING STYLES AND LEARNING STRATEGIES IN LEARNING ENGLISH USED BY NON-ENGLISH STUDENTS

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ABSTRACT

Non-English students of Nursing and Economics need to learn English effectively by using appropriate learning strategies that reflect their learning styles in which to achieve their learning goals. This study investigated learning styles and learning strategies in learning used by non-English students. An explanatory mixed-methods design was used involving both quantitative and qualitative data. The findings revealed that out of listening, speaking, and writing strategies, there was a statistical difference (p> 0.05) in the language learning strategies used in reading by different sensory learning styles (visual, auditory, and tactile). For personal learning styles, the use of strategies in speaking and reading employed by Extroverted-Random-Open and Introverted-Concrete-Closure of Nursing and Economics students also had statistical differences (p< 0.05). On the contrary, strategies in listening and writing used by both groups of Extroverted-Random-Open and Introverted-Concrete-Closure were no statistical differences. Meanwhile, in cognitive learning styles, there was a statistical difference (p> 0.05) in the use of strategies in speaking and reading between synoptic and etanic Science and Social Science students. These findings showed that both Nursing and Economics students used the strategies for receptive skills (listening and reading) and productive skills (speaking) in high-frequency usage except for writing strategies in the moderate range. It means that they can be categorized as language learners and users

Keywords: learning Styles, learning Strategies, Non-English Students

LATAR BELAKANG

Learning styles and learning strategies in learning English used by non-English students are two elements of the learning process that can foster learners' autonomy in language learning. Non-English students at the University of dr Soebandi Jember need to learn English effectively by using appropriate learning strategies to achieve their learning goals. They also should expand and be aware of their learning styles and realize that the use of learning strategies reflects their learning styles. Yan (2010) studied learner differences between English majors and non-English majors in language learning, which found that English majors gain satisfactory achievement in English learning. Besides, Li and Qin (2006) argued that learning style is closely linked to the learners' choice of learning strategies. This fact seems that learning styles become internal traits of learners, while strategies are external skills consciously used by learners.

The purpose of this study is to investigate learning styles and language learning strategies used by non-English students of Nursing and Economics who are currently engaged in learning English. In this case, a comparative study between non-English students consisting of Nursing and Economics students in terms of the use of learning strategies by different learning styles in the EFL context. It aims to contribute to the understanding of learning English in different academic majors.

The study used two questionnaires (Learning Styles Survey and Language Strategy Use Survey constructed by Cohen et al., 2002). It focuses on 1) learning strategies used by non-English students of Nursing and Economics in learning English. 2) Learning syles used by non-English students of Nursing and Economics in learning English, and 3) the differences in the learning strategy used by non-English students of different learning styles. Theoretically, this study will explore the learning styles and learning strategies which are relevant to language learning.

METODE PENELITIAN

The mixed-methods design of the study used explanatory mixed-methods design (two-phase model). The first phase was to gain quantitative data (e.g. questionnaires of Language Strategy Use Survey and Learning Style Survey given to the whole subjects) and the second phase was followed by qualitative data (e.g. interviews undertaken with the small groups of subjects).

The population is Nursing and Economics Department at the University of dr. Soebandi Jember. The students have enrolled International Program and taken English Intensive Course. The students were

selected using the method of cluster sampling. The sample size was 70 students for representative of the population of Nursing and Economics students. The research instruments are two questionnaires of the use of Style and Strategy Surveys that were constructed by co-author Cohen, with Rebecca Oxford and Julie Chi. It is published with two kinds of surveys; Language Strategy Use Survey (Cohen, Oxford and Chi, 2002) and Learning Style Survey (Cohen, Oxford and Chi, 2002).

The data were analyzed through qualitative and quantitative analysis. It used statistical processes including Descriptive Statistics, T-test, and ANOVA (Analysis of Variance) to determine the statistical differences in mean scores of the use of learning strategies between Nursing and Economics students with different learning styles. Meanwhile, to determine the frequency of learning strategies and styles used, an interpretation mean score was employed. Students' responses were categorized into three categories, which are high, moderate, and low-frequency use of strategies and styles.

HASIL DAN PEMBAHASAN

1. **Types of learning strategies used by non-English students**

A variety of the use of strategies for both nursing and economics students is provided in descending order from most to least used

and gives a possible rationale for the results. For both groups, the four language skills determined to be of the greatest significance of using strategies during English language learning process. According to the findings of qualitative analysis from interviewing 12 key informants on different learning styles showed that there were differences and similarities in the use of strategies in four language skills. Generally, the finding of interview results met the consistency of the quantitative results. As reported by student 1 to 12 said that they use various strategies to learn English. The strategies in listening, speaking, reading and writing they use generally stated in Language Strategy Use Survey. This is in line with Hong's (2006) findings who studied on learning strategies used by monolingual and bilinguals students. In his findings of the interview result reported that from both groups mentioned using learning strategies that were similar to items listed in the Strategy Inventory of Language Learning. It is indicated that what they answered in the questionnaires responses were really what they have already experienced and agreed to use certain strategies by reflecting to their own learning styles.

Table 1. Mean Difference of the overall strategies use by group ** *p< .05 level* *Significant*

Strategy use	Economics students		Nursing Students		Sig.
	Mean	Std. Dev.	Mean	Std. Dev.	
Listening	3.75	0.406	3.75	0.406	0.981
Speaking	3.79	0.328	3.59	0.358	0.017
Reading	3.80	0.364	3.50	0.436	0.004
Writing	3.34	0.416	3.33	0.499	0.412

Table 1 shows the mean difference of overall strategies use of each skill between nursing and economics students. In listening strategies use the significance level 0.981 is greater than p. 0,05 that means both groups were at the same frequency level. It was similar to writing skill with significance level 0.412 that greater than p. 0,05. It means that the use of strategies was no difference among two groups. On contrary, for two skills, reading strategies with significance level 0.004, and speaking strategies with sig. 0.017 are less than p. 0,05 mean that economic students were different from nursing students in using more strategies. Thus, the use of overall strategies of each skill showed that in listening strategies, there is no difference of both group. In speaking and reading, there is difference that economics students use more strategies than nursing students. There is also no difference in writing strategies, which nursing students use more strategies than economic students.

2. **Types of learning styles employed by non-English students**

The types of learning styles divided into sensory, personal and cognitive learning styles. For sensory learning styles, nursing student characterized as more visual learners that prefer to something to read or a picture, while economic students are more auditory learners in which prefer to listen when learning. The report of percentage showed nursing students: Visual=71.1%, Auditory=23.1%, Tactile=5.3%, and economic Visual=37.5%, Auditory=46.9%, Tactile=15.6%. Second category was based on personal learning styles. the findings showed that both group of students are more extroverted, random and open learning styles rather than introverted, concrete, and closure. A student with extroverted learning style can easily start a conversation and communication which is considered as an inevitable aspect of a good language learner, and introverted is reverse. As reported that nursing students were Extroverted-random-open=68.4%, Introverted-concrete-closure=31.6%, and economic students: Extroverted-random-open=81.3%, Introverted-concrete-closure=18.8%. The last category of learning styles reported that nursing students tend to be synoptic rather than etanic. This is similar to economic students are disposed to be synoptic than etanic. nursing students were synoptic=53.9, etanic=42.6% and economic students were synoptic=62.5% and etanic=37.5%.

3. **The use of learning strategies by different learning styles**

The first part describes the difference of leaning strategies use by different sensory learning styles consisting audio, visual, and tactile based on the result of Anova as seen in the following Table 3

Table 3 Mean differences of learning strategies based on sensory learning styles

Strategy use	Sensory styles	Economics students		Nursing Students		Sig.
		M	**SD.**	**M**	**SD**	
Listening	Visual	3.72	0.43	3.77	0.43	
	Auditory	3.77	0.35	3.82	0.27	.626
	Tactile	3.80	0.22	3.25	0.36	
Speaking	Visual	3.84	0.40	3.88	0.40	
	Auditory	3.74	0.23	3.62	0.18	.284
	Tactile	3.83	0.27	3.57	0.32	
Reading	Visual	3.90	0.35	3.51	0.44	
	Auditory	3.70	0.36	3.57	0.41	.036
	Tactile	3.83	0.27	3.13	0.19	
Writing	Visual	3.83	0.40	3.30	0.36	
	Auditory	3.56	0.34	3.56	0.26	.253
	Tactile	3.68	0.43	2.80	0.27	

Table 3 showed that the mean differences of learning strategies used by nursing and economics students on different learning styles are at a relatively the same frequency level. In general, for overall strategies are in high frequency use by the range of moderate to agree (M=between 2.80 to 3.90). Tactile economics students use more strategies in listening (M=3.80) rather

than visual nursing students (M=2.25). It is similar to reading strategies use that visual economics students (M=3.83) more frequent than visual nursing students (M=3.13). Compared to visual and tactile economics students whose in the high frequency use, while nursing students were in the moderate frequency use. However, among the four language skills, reading strategies showed significant level 0.036 that less than 0.05 (p. < 0.05). It means that there was statistical difference of learning strategies employed by visual, auditory, and tactile nursing and economic students. This is parallel to Sabatova (2008) research showed that to the results of regression analysis there were not meaningful predictors of language achievement for visual and tactile learning styles, except for the auditory learning style. Referring to Sabatova study, it can be said the only auditory styles affected to language achievement. Thus, the current study asserted that the only reading strategies affected by sensory learning styles.

The second part based on the strategies use and personal learning styles. It reported that speaking and reading strategies showed statistical differences between and within groups of Extroverted-Random-Open nursing and economics students, Introverted-Concrete-Closure nursing and economics students. On the other hand, strategies in listening and writing employed by both groups of Extroverted-Random-

Open and Introverted-Concrete-Closure were statistically at the same frequency.

Table 4 Mean differences of learning strategies based on personal learning styles

Strategy use	Personal styles	Economics students		Nursing students		Sig.
		M	SD	M	SD	
Listening	Extroverted-Random-Open	3.79	0.40	3.82	0.35	
	Introverted-Concrete-Closure	3.67	0.43	3.74	0.40	.720
Speaking	Extroverted-Random-Open	4.03	0.28	3.63	0.28	
	Introverted-Concrete-Closure	3.73	0.39	3.57	0.38	.023
Reading	Extroverted-Random-Open	3.76	0.35	3.48	0.42	
	Introverted-Concrete-Closure	3.93	0.33	3.55	0.44	.024
Writing	Extroverted-Random-Open	3.40	0.39	3.28	0.32	
	Introverted-Concrete-Closure	3.53	0.37	3.45	0.37	.540

Table 4 reports that the mean difference of leaning strategies used by nursing and economics students are at a relatively the same frequency level. They used for overall strategies in moderate to high frequency use (M=between 3.28 to 4.03). Extroverted-Random-Open of nursing and economics students students use more strategies in listening and speaking rather than Introverted-Concrete-Closure. Conversely, in reading strategies, both Introverted-Concrete-Closure nursing and economics students use more strategies rather than Extroverted-random-Open students of both groups. It was similar to writing strategies, students of Introverted-Concrete-Closure also use more strategies than Extroverted-Random-Open Social. In this case, Extroverted-Random-Open and Introverted-Concrete-Closure of both groups have different strategies frequency use.

Based on the mean difference of learning strategies use by Extroverted-Random-Open and Introverted-Concrete-Closure, the result of Anova reported there was statistical difference of the use strategies in two language skills. The significance level of speaking was $0.023 < sig.0.05$ between and within Extroverted-Random-Open and Introverted-Concrete-Closure of nursing and economics students. And the significance level of reading was $0.024 < sig.0.05$ between and within Extroverted-Random-Open and Introverted-Concrete-Closure of nursing and economics students. For other skills, the significant level of listening was 0.720, and 0.540 for writing that were greater than 0.05 (p. > 0.05). It means strategies in speaking and reading employed by Extroverted-Random-Open and Introverted-Concrete-Closure of nursing and economics students had statistical difference

in frequency usage. On the other hand, strategies in listening and writing were statistically at the same frequency.

The last findings concerning strategies use by different cognitive styles, it was similar to personal learning styles reported that the use of strategies in speaking and reading employed by synoptic and etanic nursing and economics students had statistical difference frequency.

Table 5 Mean differences of learning strategies based on cognitive learning styles

Strate gy use	cognitive styles	Economics students		Nursing students		Sig.
		M	SD	M	SD	
Listen ing	Synoptic	3.71	0.28	3.63	0.26	.368
	Etanic	3.78	0.46	3.66	0.41	
Speaki ng	Synoptic	3.76	0.27	3.40	0.28	.008
	Etanic	3.84	0.35	3.75	0.29	
Readi ng	Synoptic	3.38	0.38	3.36	0.44	.006
	Etanic	3.79	0.31	3.63	0.38	
Writin g	Synoptic	3.35	0.39	3.26	0.31	.446
	Etanic	3.53	0.32	3.40	0.33	

In table 5, the average frequencies of the strategies used by synoptic and etanic nursing and economics students shows that they are at different frequency level. They used for overall strategies in moderate to high frequency (M=between 3.26 to 3.79). Etanic students of nursing and economics students used more strategies than synoptic students in overall language skills: listening, speaking, reading, and writing. Meanwhile, it was similar to the previous learning styles, the result of Anova reported the significance level of listening (sig.0.368) and writing (sig.0.446) were greater than sig.0.05 (p > 0.05) between and within groups of synoptic and etanic nursing and economics students. On the other skills, the significance level showed that speaking (sig. 0.001) and reading (sig.0.006) by means of more than 0.05 (p < 0.05). Based on the results, it indicated that there was statistical difference in the use of learning strategies in reading and speaking employed by synoptic and etanic nursing and economics students. It means that cognitive styles also play important role in the use of learning strategies. As stated in Cesur (2008) study, it was explained that the cognitive styles and strategies in language learning predict the level of language achievement. Both of cognitive styles and the use of strategies has close relationship. In line with Anam (2010) also reported that there was a relationship between cognitive styles and the use of learning strategies. In addition to his study also revealed that synoptic learners tend to employ more strategies rather than etanic learners. Similar to the current study that mostly economics students prefer to be synoptic, thus they use more strategies rather than nursing students. In Addition, there were differences of the learning strategies use between non-English students (nursing

and economics students) by different learning styles. The differences were restricted on the use of learning strategies in reading and speaking by different sensory, personal, and cognitive styles.

Given statistically significant influence of personal and cognitive styles and the use of language learning strategies, learners are suggested to be more aware of the important learning strategies in language learning. The students can also try out any learning strategies which enable them to be better language learner and language user regardless of their learning styles. It is aimed eventually to improve their language proficiency for overall language skills. According to Sabatova (2008), if students understand their learning style and use appropriate learning strategies, they can work more effectively and achieve better learning results.

KESIMPULAN

The findings of the strategy use by nursing and economic students of different sensory learning styles revealed that there was statistical difference of the strategies use in reading, whereas other strategies in listening, speaking and writing employed by visual, auditory, and tactile had no statistical differences. They were relatively at the same frequency level that is high range of frequency usage, except writing was in moderate range. In different personal

learning styles, the use of strategies in speaking and reading showed differences within groups of Extroverted-Random-Open and between groups of Introverted-Concrete-Closure. Meanwhile, for different cognitive learning styles, the use of strategies in speaking, reading and writing employed by synoptic and etanic students had statistical difference. The differences addressed between and within the groups. Conversely, the use of strategies in listening used by both groups on different cognitive styles showed no statistical difference. It means that although cognitive styles only affected to the strategies use in reading and speaking, it still play important role in the use of learning strategies for all language skills.

DAFTAR PUSTAKA

Anam, S. (2010*). Learning Strategy Uses in EFL Reading by The English Department Students of Unesa and Their Relation to Cognitive Style and Proficiency*. Master Thesis, State University of Surabaya, Surabaya.

Carson, J. G., & Longhini, A. (2002). Focusing on Learning Styles and Strategies: A Diary Study in a Immersion Setting. *Language Learning*, 52 (2), 401-438.

Cesur, M. O. (2008). *A model explaining and predicting the relationship between university prep class students' language learning strategies, learning styles and academic success in foreign language.* Doctorate thesis, Social Sciences Institute, YTU, İstanbul, Turkey

Chamot, A. U. (2004). Issues in Language Learning Strategy Research and Teaching. *Electronic Journal of Foreign Language Teaching,* 2 (2), 14-27.

Chang, S. J. (1990). *A study of language learning behaviors of Chinese students at the University of Georgia and the relation of those behaviors to oral proficiency and other factors.* Dissertation Abstracts International, 52(02)

Cohen, A. (1998). *Strategies in learning and using a second language*. London: Longman.

Cohen, A. D. (2007). Coming to terms with language learner strategies: Surveying the experts. In A. D. Cohen & E. Macaro (Eds.), *Language learner strategies: 30 years of research and practice* (pp. 29–45). Oxford: Oxford University Press.

Cohen, A. D., & Weaver, S. J. (2006). *Styles and Strategies Based Instruction:* A Teachers' Guide . Minneapolis, MN: Center for Advanced Research on Language Acquisition, University of Minnesota.

Cohen, A. D., Oxford, R. L., & Chi, J. C. (2002). *Learning Styles Survey*. Minneapolis, MN: Center for Advanced Research on Language Acquisition, University of Minnesota.

Cohen, A. D., Oxford, R., & Chi, J. C. (2002). *Language Strategy Use Survey*. Minneapolis, MN: Center for Advanced Research on Language Acquisition, University of Minnesota.

Sabatova, J. (2008). *Learning Styles in ELT*. Czech Republic: Masaryk University Brno.