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## **AN INVESTIGATION OF LEARNING APPROACHES AND LANGUAGE LEARNING STRATEGIES: ARE THEY RELATED?**

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**Abstract:** In related research, learning approaches and learning strategies have been reported as important variables influencing the quality of student learning. The aim of the present study is to investigate the relationship between the learning approaches and the language learning strategies of higher education students. The research was conducted with the participation of 493 freshmen (M=257, F=236) attending various departments at Balikesir University in Turkey. For research purposes, the Turkish versions of Strategy Inventory of Language Learning (SILL) and the Approaches and Study Skills Inventory for Students (ASSIST) were used. After the reliability of both instruments was computed, descriptive and inferential statistics were used to analyze data. The findings are to be discussed and commented considering students' levels of language learning strategy use and their learning approaches and changes in those levels according to participants' gender and field of study.

**Keywords:** Learning approaches, language learning strategies, gender, grade level, field of study

### **Introduction**

Learning approaches (LAs) and language learning strategies (LLSs) are considered as important variables influencing the quality of student learning. Oxford (1990) defines LLSs as "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferrable to new situations" (p. 8). LAs on the other hand are the different orientations (deep, surface and strategic) students in higher education may adopt depending upon the their perceptions of the content, the context and the demands of academic situations (Marton, 1976; Ramsden, 1979).

Enwistle and Peterson (2004) argue that like other broad constructs such as conceptions of knowledge and conceptions of learning, Las (orientations) also develop and change during the learning process and within different environments. In their review Baeten et al. (2010) present a list of encouraging and discouraging factors that may influence students' orientations to learning (p. 247), where they group them as contextual factors , perceived contextual factors and student factors. Among many other factors, they discuss the influence of discipline or area of study, gender, academic skills and coping strategies, learning habits, and emotions on students' adoption of LAs. In conclusion, since the findings are inconclusive and inconsistent, their review points out to the necessity of additional research on these issues. Additionally, as Oxford and Burry-Stock (1995) suggest, teachers must also keep in mind differences in motivation, learning style, gender, and other factors that affect LLS use. So, examining the factors that influence LLS use would give both researchers and teachers insight on how to enhance student learning.

In this respect, this study endeavors to determine and compare the LAs and LLSs of students in higher education. The research questions addressed in this study are:

1. What is the level of relationship between students' LAs (deep, surface and strategic) and their LLSs?
2. Is there a significant difference between LAs and LLSs based on students' major and gender?

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Prior to this study, no attempt has been made to investigate the relationship between LAs and LLSs. The authors' aim is not to replicate the studies found in literature, but to bring an insight into the interplay between them and to discuss the differences based on factors such as discipline and gender.

## **Review of Research on Learning Approaches and Language Learning Strategies**

Studies conducted on gender differences and LAs adopted have not produced conclusive results. While some research reported no consistent evidence of significant difference between males and females (Ballantine, Duff & McCourt Larres, 2008; Mogre & Amalba, 2015; Vermunt, 2005), some other found significant differences (Karaduman et al., 2015; Xie & Zhang; 2015). Similarly, studies investigating differences in learning orientations based on field of study revealed interesting findings. Baeten et al. (2010) showed that students in various disciplines differ in their LA, with students in human sciences in general adopting the deepest approach. Ballantine, Duff and McCourt Larres (2008) found significant increase in accounting and business students' surface approach to learning. Booth, Luckett & Mladenovic (1999) found that Australian university accounting students had significantly higher surface approach scores and lower deep approach scores than arts, education and science university students. Lake, Boyd and Boyd (2015) demonstrated that deep approach didn't appear to vary greatly across seven discipline areas; however the results considering the surface approach revealed that Arts & Social Science had a significantly lower score than Environment, Science & Engineering, Health & Human Science, Business, and Tourism & Hospitality. Kember, Leung and McNaught (2008) observed that the social science students were most likely to adopt a deep approach and least likely to adopt a surface approach compared to their counterparts in science disciplines.

Relatively few studies have examined the relationship between field of study and LLS use. Chang (1991) found that compensation strategies were used the highest and the affective strategies the lowest. Moreover, humanities and social science majors utilized more learning strategies than science majors. Peacock and Ho (2003) reported that English major students made use of strategies the most, while computer science majors used the strategies the least. Chang (2012) reported that European Language majors used the strategies the most, while Sports Business Management majors utilized them the least. Regarding gender differences in LLS use there are some inconsistencies. In many LLS studies involving gender, differences between males and females were reported, usually favoring females as more frequent users of strategies (Alhaysony, 2017; Al-Natour, 2012; Goh & Foong, 1997). However, a few studies gave accounts of males surpassing females in strategy use (Peng, 2001; Tercanlioğlu, 2004; Wharton, 2000), whilst in some other studies, no empirical evidence was found to support gender factor in LLS preference and use (Chang, 2012; Griffiths, 2003; Poole, 2000).

## **Methods**

### **Participants and Sampling**

This descriptive study involved students attending various departments at Balikesir University in Turkey. Data were gathered from 493 freshmen (female=236, male=257), who took English as a foreign language as an obligatory course. Students were selected on voluntary basis with convenience sampling. The administration of each inventory took 20-25 minutes.

### **Instruments**

For research purposes, the Turkish versions of Strategy Inventory of Language Learning (SILL) and the Approaches and Study Skills Inventory for Students (ASSIST) were used.

SILL (Oxford, 1990) consists of 50 items under two main constructs of direct (29 items) and indirect (21 items) learning strategies. Direct strategies are subdivided into memory (9 items), cognitive (14 items), and compensation (6 items) strategies, whereas indirect strategies are subdivided into meta-cognitive (9 items), affective (6 items), and social (6 items) strategies. The Turkish version of SILL was adapted by Cesur and Fer (2007) and the correlations of the six sub-dimensions of the adapted version with the original ones range from .65 to .78.

ASSIST (Tait, Entwistle & McCune, 1998) measures students' approaches to learning on mainly three dimensions as deep, strategic, and surface-approach. The inventory is comprised of 67 statements and respondents indicate their agreement with each statement using a five point Likert scale. The Turkish version was adapted by Senemoglu (2011) and has a correlation coefficient of .82 with the original one. In the present study, the 52-item second section of the inventory was used to find out students' preferences to LAs.

## Data Analysis

To facilitate efficient data analysis, data were coded into SPSS version 21. Both descriptive and inferential statistics were used during analyses. Pearson correlation was run to investigate the relationship between Las and LLSs. One way between groups multivariate analysis of variance (MANOVA) was performed to determine significance of variation in Las and LLSs in relation to gender and fields of study.

## Results And Findings

### Research Question 1: What is the level of relationship between students' Las (deep, surface and strategic) and their LLSs?

Based on data obtained from ASSIST and SILL scores (Table 1), the correlations of SILL with deep approach and strategic approach are at medium level (.35). These results might indicate that language learning strategies and learning approaches of deep and strategic, as measured with self-report inventories, are intertwined.

Table 1. Correlations between subscales of ASSIST and SILL

Subscales ASSIST	Entire SILL	SILL Direct	SILL Indirect	Memory	Cognitive	Compensation	Metacognitive	Affective	Social
Deep	,348**	,368**	,280**	,455**	,278**	,231**	,255**	,259**	,216**
Surface	,072	,080	,052	,121**	,018	,116**	,042	,082	,014
Strategic	,346**	,332**	,322**	,435**	,244**	,186**	,280**	,341**	,226**

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### Research Question 2: Is there a significant difference between LAs and LLSs based on students' major and gender?

To investigate the differences a one way between groups multivariate analysis of variance (MANOVA) was performed. Findings indicated that both males and females were equally motivated for achievement, organizing their studies, monitoring their understandings and managing their time (strategic approach) more than the other approaches. And compared to males, females were significantly in favor of surface approach. Even though the differences were not significant, the males were slightly more inclined to deep approach, whereas the females preferred strategic approach slightly more. When the results for the entire inventory and subscales of SILL were considered, there were statistically significant differences ( $p < 0.05$ ) in entire inventory and subscales of SILL mean scores, except for memory strategies:  $F(1, 491)=2.02$ ,  $partial\ eta\ squared=0.004$  and affective strategies:  $F(1, 491)=2.70$ ,  $partial\ eta\ squared=0.020$ . These findings reveal that male students were inclined to use LLSs more than females.

Taking the majors or disciplines of students into account, a significant difference was observed for all Las ( $p < 0.05$ ). Overall, the findings indicate that students at different disciplines were more inclined towards strategic approach. A further outcome that emerged was that students at health sciences tended to use surface approach more than the other disciplines, while students studying at education faculty were the ones favoring the surface approach the least. Perhaps the most interesting finding to emerge from the analysis was that engineering students had the highest total mean scores in deep and strategic approach.

Based on the results for the entire inventory and subscales of SILL, there were statistically significant differences among students from different majors. Pair wise post hoc analyses indicated that students studying at engineering departments made use of language learning strategies the most, while the students enrolling at health sciences departments resorted to them the least. Interestingly, students majoring at education had the lowest total mean scores in memory and compensation strategies.

## Conclusion

This study used quantitative data from two scale applications to investigate the relationship between students' LAs and LLS use. Further, this research set out to examine the differences in LAs and LLSs based on gender and field of study. The results of the research showed that students' LAs were associated with their language learning strategy use. There was positive correlation between all components of LLSs and deep and strategic approaches, while the only significant correlations between surface approach and LLSs were memory and compensation strategies. The results further showed that ASSIST and SILL identified differences between gender groups and fields of study.

## Recommendations

Given that the previous and present research suggest mixed findings on factors like gender and field of study, there is a need for more research to explore the relationship between learners' LAs and their LLSs. Later, those results obtained might be utilized to design the courses for individual students with varying types and levels of LAs and strategy use, thus provide students instructional support in a constructive way.

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