

# Crosscultural differences in learning strategies and study-skills

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**ABSTRACT:** Learning strategies have been the focus of much attention during the last decades. Language teachers and researchers have been interested in the phenomenon of foreign language learning strategies and study skills for a number of years. Study skills are important for students to realize their potential to become successful at what they wish to achieve. It has been believed that there are some differences between Turkish and European students regarding their proficiency level. The goal of this study which addresses the use of learning strategies among students in different cultural contexts is to state the ingredients of study skills and learning strategies, to show whether some crosscultural differences occur between Turkish and West European university students and to find out whether such differences might be held responsible for such a discrepancy. The students of the English departments enrolled in Turkey, Holland, Belgium and Spain participated in this study. The learning and study strategy use of six groups of students in four different countries has been examined by administrating LASSI (Weinstein 1987). The group consisted of 348 students, 300 females and 48 males, who were in the last year of their teacher training. These students ranged in age from 21 to 24 years. The LASSI profiles of the Turkish students have been compared with the profiles of the Dutch, Belgian and Spanish students.

**Key Words:** learning strategies, anxiety, language learning, study skills, crosscultural, motivation.

**RESUMEN:** Las estrategias de aprendizaje han sido el centro de interés durante las últimas décadas. Tanto los profesores de idioma como los investigadores han estado interesados, durante años, en el fenómeno de las estrategias de aprendizaje y las técnicas de estudio relacionadas con las lenguas extranjeras. Las técnicas de estudio son importantes para que los estudiantes se den cuenta de su potencial a la hora de llegar a triunfar en aquello que desean. Se cree que hay algunas diferencias entre los estudiantes turcos y los europeos con respecto al nivel de competencia. El objetivo de este estudio, centrado en el uso de estrategias de aprendizaje entre estudiantes de distintos contextos culturales, es exponer los componentes de las técnicas y estrategias de aprendizaje para mostrar si algunas diferencias transculturales se manifiestan entre estudiantes universitarios turcos y europeos y averiguar si tales diferencias son las responsables de las discrepancias existentes. Los estudiantes que conforman el estudio pertenecen al departamento de inglés en Turquía, Holanda, Bélgica y España. La estrategia de estudio y aprendizaje utilizada con estos estudiantes de cuatro países ha sido revisada mediante el

uso de LASSI (Weinstein 1987). El grupo lo formaron 348 estudiantes, 300 mujeres y 48 hombres, todos ellos en su último año de estudios. El rango de edad estaba comprendido entre los 21 y 24 años. Los perfiles LASSI de los estudiantes turcos han sido comparados con los perfiles de los holandeses, belgas y españoles.

**Palabras clave:** estrategias de aprendizaje, ansiedad, aprendizaje de lenguas, técnicas de estudio, cros cultural, motivación.

## 1. INTRODUCTION

The impact of culture on learning and, specifically, the role of context in self-regulation has been documented in several studies. Although many European nations can be characterized as industrialized Western countries that offer their students good opportunities, these countries still differ in learning contexts, as well as in values and beliefs about education from Turkey. Recent research has also reported differences in the use of self-regulated learning strategies between minority students in the American society and Anglo-American students (Tallent-Runnels 1996) and between Anglo-American students and English speaking students outside the USA (Alexander 1996). Differences in the use of learning strategies have also been documented between Australian and Japanese students (Purdie & Hattie, 1996). Using the Gregorc Style Delineator, John Backes (1993) studied the differences in learning styles between Native American Chippewa and non-native American students and found out that the non native American students preferred concrete, sequential learning (inductive learning) and the Native American students preferred deductive styles, indirect and reflective learning and experiential learning. Torpong Goodson (1993) surveyed 227 East Asian students and found that Chinese and Taiwanese students preferred visual learning and Japanese kinesthetic learning and the Korean preferred tactile and visual learning.

Although some students will be successful in learning a foreign language regardless of the teaching method, it is recognised that a mismatch between the learning style of a student and teaching style of a class tutor can result in learner anxiety or dissatisfaction, and reduced achievement (Oxford & Lavine 1992; Felder and Henriques 1995; Ehrman 1996). There are so many links between a student's learning style and their strategy use which have been suggested (Ehrman 1994; Ehrman & Oxford 1990; Moody 1988; Tyacke 1991). Furthermore, it should be remembered that successful learners do not use the same techniques (Stevick 1989); and there appears to be no single set of strategies appropriate for recommendation to all learners (Gillette 1987). Nenniger (1991) conducts a study on the American students and those living in Switzerland American grade 3 students attribute their success to effort than German Grade 3 students. German students are found to be more strategic than Americans when their spontaneous strategy use is compared on a memory task. German parents and teachers report more direct instruction than Americans and check their students more.

Bodil Olaussen and Ivar Braten (1999) conduct a crosscultural study and aim to assess students' use of self regulated learning strategies and conclude that cultural differences may contribute to discrepancies in the use of strategies and focus on the cultural influence factors of individualism versus collectivism, the value placed on education, belief in ability versus effort and social support for academic pursuits. On the motivational subscale, Norwegian students are less inclined to do what they are told to do. Moreover, Norwegian students place

more value on education. A similar hypothesis is made by Chen and Stevenson (1995) propose that three aspects of culture are relevant to students' academic achievement:

- a. the value placed on education
- b. belief in ability versus effort
- c. social support for academic pursuits.

The value the culture places on education and the emphasis on effort influence students' motivation and learning behaviors. This may explain, they conclude, American students as a whole tend to perform at a lower level than students from Asian countries (China, Japan, Korea, Hong Kong and Taiwan). Asian parents are more likely than American parents to enroll their children in good schools and after school classes.

Sushila Niles (1996) undertakes a study to investigate whether the stereotype that Asian students rote learn is sustained or challenged, using evidence gathered from Australian and Sri Lankan university students. Some items from Biggs's (1987) Study Process Questionnaire and an instrument developed by the author to estimate the relative importance of learning goals are administered to 131 Australian and 134 Sri Lankan students. The results raise serious doubts concerning the validity of the existing stereotype regarding Asians and Sri Lankan students are not rote learners, especially in the sense that they memorize material, either in learning generally or in studying for examinations. They demonstrate a strong preference for complex strategies. The results suggest that Sri Lankans are significantly more committed to higher strategies in preparing for examinations. Understanding was an important condition, followed by «looking for main ideas» and «try-ing to see how all the facts fit together.»

Robert Loo (2004) investigates an explanatory study of which the main purpose is to examine the relationships between Kolb's four learning styles and four learning types on the one hand, and students' preferences for 12 specific learning situations on the other hand. The results indicate that learning style is not a major determinant of learning preferences. In this sample, all learning styles and types show a dislike for writing major term papers, giving presentations to the class and doing library research, but display a liking for doing practical exercises, solving problems, and participating in groups.

Kagitcibasi and Berry (1989) highlighted some trends of cross-cultural psychology that merit further investigation. Among these was the area of individualism-collectivism. Essentially, individualism versus collectivism has been discussed as a West-East cultural difference. For example, the European have been pictured as generally emphasising the individual, whereas the Japanese have been depicted as one in which interdependency, collaterality and subordination of the individual to the group or the family are emphasised. Differences in many psychological processes have been found between groups of subjects from individualistic and collectivistic cultures, respectively (Kagitcibasi & Berry 1989). The West-East cultural difference regarding individualism-collectivism may also be reflected in differences between Western and Asian students in self-regulated learning. According to Purdie & Hattie (1996), Western students have been viewed as rather active in their learning approach, characterised by assertiveness, independence, self-confidence, acceptance of diversity and a willingness to question and explore alternative ways of thinking and acting. In contrast, Asian students have been characterised as rather dependent on rote learning, more concerned to reproduce what is learned with little understanding. Asian students are also seen to believe that knowledge

is something to be handed down by authorities. In sum, they are often viewed as passive learners, exhibiting compliance, obedience and a concern only to absorb knowledge rather than understand it.

The different ways of characterising Western and Asian students seem to accord with the different views that Asian and American mothers hold about the qualities they value in their children. Whereas American mothers more frequently mention such attributes as 'self-confidence', 'tolerance of differences of opinion', 'creativity' and 'assertiveness', Japanese mothers more frequently mention 'compliance with authority', 'obedience in good grace' and 'cooperation with the teacher' (Holloway 1988).

Apparently contradicting the contrasting stereotypical description of Western and Asian students referred to above is the fact that Asian students often display considerable self-control in their pursuit of academic achievement (Purdie & Hattie 1996). However, the self-control of Asian students may be of a 'secondary' nature, implying that individuals gain satisfaction or rewards by accommodating to existing realities or striving for harmony with things as they are. On the other hand, 'primary' control involving deliberate actions to influence existing realities such as situations or problems may be more typical of Western students (Rothbaum et al. 1982). To the extent that the self-control displayed by Asian students in the pursuit of academic achievement is an expression of secondary control, it seems somewhat unclear whether such self-control should be interpreted as a high level of self-regulated learning. As Purdie & Hattie (1996) have pointed out, most Western research on control has associated only primary control with positive self-control. In their view, however, a negative interpretation of secondary control may be unwarranted given the more collectivistic orientation of Eastern cultures. Besides, the possession of secondary control does not imply the absence of such qualities as persistence, commitment, perseverance and effort.

Alexander (1996) recently compared the learning and study strategy profiles of Grade 9 female students in Singapore with average or above average academic ability with those of American students. Based on the students' responses to the Learning and Study Strategies Inventory—High School Version, LASSI-HS (Weinstein & Palmer 1990), it was found that the strategy use of the Singapore group was relatively comparable with that of the American Grade 9 students who established the LASSI-HS norms. Compared with the American norming sample, the mean performance for the Singapore students slightly exceeded the 50th percentile on three subscales (Information Processing, Selecting Main Ideas and Study Aids), was slightly below on three subscales (Attention, Motivation and Time Management) and was within the 50th percentile bandwidth on the remaining four subscales (Anxiety, Concentration, Self-testing and Test Strategies). Again, when the profiles of the Singapore students were compared with those of another sample of average ability and gifted American Grade 9 students, the Singapore and American students were found to be rather similar, with only one significant subscale difference (Study Aids) existing between the two cultural groups (in favour of the Singapore students). However, it was also found that the profiles of the Singapore group were more aligned with those of the gifted than the average American students. Still, the gifted American students had better scores on the Motivation, Anxiety and Test Strategy scales than the Singapore students. Only on the Study Aids scale did the Singapore students score higher than the gifted American students.

Alexander (1996) also examined the Singapore students' conceptions of knowledge. It was found that these students most often described knowledge as learned information or factual knowledge that was acquired through schooling. Another distinguishing attribute of

knowledge for the Singapore students was that it involved understanding and comprehension. The students also mentioned the utility and applicability of knowledge, particularly in determining their future success. American students are more likely to describe knowledge as valueless or meaningless and also to place less importance on schooling. This suggestion also accords well with the more general view that learning strategies may serve as an important intermediate link between cultural values and beliefs and academic achievement.

Alexander & Dochy (1995) also found differences in cultural beliefs between American and European students that may contribute to differences in learning. Asking American and Dutch undergraduate and graduate students about their conceptions of knowledge, these researchers identified cultural differences in the implicit theories that students from these two Western countries held about knowing. Most notably, the American students showed a greater tendency to judge schooled knowledge to be valueless and to express some disdain for the educational process than the Dutch students, who did not express such negative attitudes toward schooled learning.

## 2. METHODOLOGY

### 2.1. Participants

The students of the English departments enrolled in Turkey, Holland, Belgium and Spain participated in this study. The learning and study strategy use of six groups of students in four different countries has been examined by administering LASSI (Weinstein 2002). The group consisted of 348 students, 300 females and 48 males, who were in the last year of their teacher training. These students ranged in age from 21 to 24 years. The LASSI profiles of the Turkish students have been compared with the profiles of the Dutch, Belgian and Spanish students who established the norms for the instrument. In the following, some of the main results of the project in a cross-cultural perspective will be reported.

*Table 1. Schools.*

OKUL	N
1. Dokuz Eylul University (Turkey)	83
2. Celal Bayar University (Turkey)	50
3. Pamukkale University (Turkey)	71
4. Belgium, St Lieven katolische School, Gent	64
5. Holland, Nijmegen Hogeschool	33
6. Spain; Alcalá University	47
Total	348

### 2.2. Data Gathering Instruments

The learning strategies and study skills are investigated in 348 students from four different countries. The LASSI is designed for students who are enrolled in college and has 77 items that focus on both covert and overt thoughts and behaviors that relate to successful learning.

The LASSI (Learning and Study Skills Inventory) developed by Weinstein and Palmer (2002) was used and some items were taken away and some other items were added and it was grouped into 8 categories:

- Motivation
- Attitude
- Time management
- Concentration skills
- Test strategies
- Selecting main idea (reading strategies)
- Information processing
- Study aids

The Attitude scale contains items concerning students' general attitudes toward and interest in college (sample item: I feel confused and undecided as to what my educational goals should be). The Motivation scale items focus on students' motivation and responsibility for performing the specific tasks related to study success (sample item: Even when study materials are dull and uninteresting, I manage to keep working until I finish). The Time Management scale contains items measuring the degree to which students create and use schedules to organize and control work progress (sample item: I only study when there is the pressure of a test). The Concentration scale items focus on students' ability to concentrate and direct their attention to academic tasks, including study activities (sample item: I find it hard to pay attention during lectures). The items on the Information Processing scale address to what extent Students use strategies to elaborate and organize information, monitor comprehension, and relate new material to prior knowledge (sample item: I translate what I am studying into my own words). The Selecting Main Ideas scale contains items measuring students' skills at selecting main ideas in the content they are given (sample item: I am able to distinguish between more important and less important information during a lecture). The Study Aids scale items are supposed to measure the use and generation of diverse technical solutions and materials aimed at supporting and increasing meaningful learning and retention (sample item: I use special helps, such as italics and headings, that are in my textbooks). Finally, the Test Strategies scale items focus on students' strategies during both test preparation and test taking (sample item: I do poorly on tests because I find it hard to plan my work within a short period of time).

The inventory has 72 items and it is a five- point likert scale. The opinions of the teachers and experts in the school of education are taken and some changes are made accordingly.

For the reliability the inventory is administered to the junior students of the School of Education, Dokuz Eylul university. The Alpha reliability varies between .73 – .85 in terms of subcategories and .78 is computed for the total instrument.

348 junior students from 6 universities and 4 countries participated in the study. The scales were mailed to the foreign and other two Turkish universities (Pamukkale, Denizli and Celal Bayar, Manisa) and 50 came from Celal Bayar , 71 from Pamukkale , 64 from Belgium, 33 from Holland , and 47 from Spain.

Perceived Ability: As a measure of perceived ability, students were asked to rate how successful they perceived themselves to be in their studies. Presumably, individuals who believe that they are successful students also believe that they are able to perform the required

academic tasks. Hence, the researcher probed the subjects' sense of capability by asking them the question, «How is your success in your studies?» and had them indicate the answer on a 5-point scale (1 = not good; 2 = fair; 3 = good; 4 = very good; and 5 = excellent).

### 2.3. Procedure

Both measures were group administered to the Turkish groups of approximately 30 students at a time. The data was sent to the teacher training departments in Holland, Spain and Belgium and they were administered by the Practicum teachers and mailed back to the researcher. Data collection took place in fall during the last year of the students' teacher training. The students were informed that their participation in the project was entirely voluntary, but none of the students present refused to answer the questions. The students did not give their names; only their gender and age were reported. The order of administration varied at random for the LASSI and the measure of perceived ability. Each group finished the tasks in the course of a 45-minute session.

## 3. RESULTS

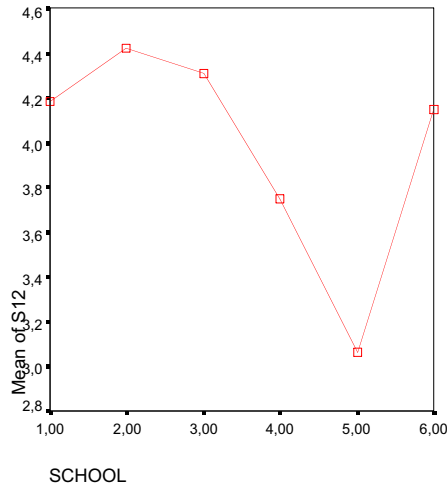
### 3.1. Descriptive Analyses

*Table 2. The most frequently used strategies and skills.*

Strategies and Skills	M	Sd
My underlining is helpful	4,0520	1,0059
I try to find a relationship between what I know and what I am learning	3,8237	2,3020
I need a quiet environment	3,7832	1,1829
I listen carefully	3,7457	1,0351
If I am having a problem,I ask another student	3,7052	1,0100
I have a positive attitude	3,6994	1,0112
Even when I do not like a course, I work hard	3,5318	1,0217
I use special study aids	3,4884	3,5722
If there is a website for my homework,I use the info	3,4769	1,1824
I translate what I am studying into my own words	3,4249	1,0882
Even if I do not like the assignment,I am able to get myself to work on it	3,3671	1,0078

The most frequently used strategies and skills crossculturally are underlining, relating what is known to what is being learned, seeking a quiet place to study, listening carefully, asking friends the problems about the course, having a positive attitude to the course, using special aids, checking for the websites, paraphrasing, doing homework and learning from mistakes.

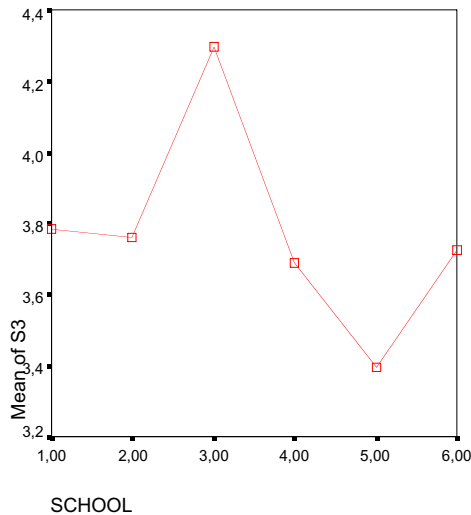
*Figure 1. Underlining and Schools.*



Turkish students make use of the strategy of underlining more frequently than the European counterparts.

The second most frequently used strategy is to relate what they have known to what they are learning and the following results are found out.

*Figure 2. The strategy “finding a relationship between the known topic and the new topic”*

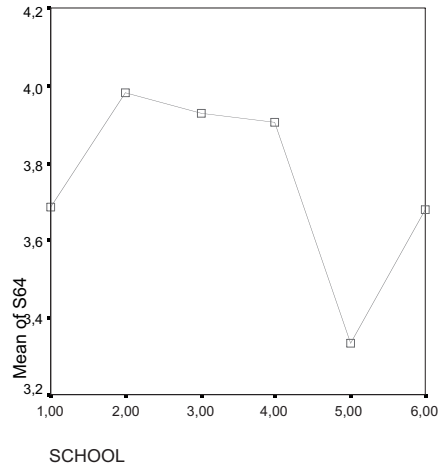


Pamukkale University excels the other universities here and the others except for Holland get more or less the same scores.



The third frequently used item is the skill "needing a quiet environment" and the results are given below.

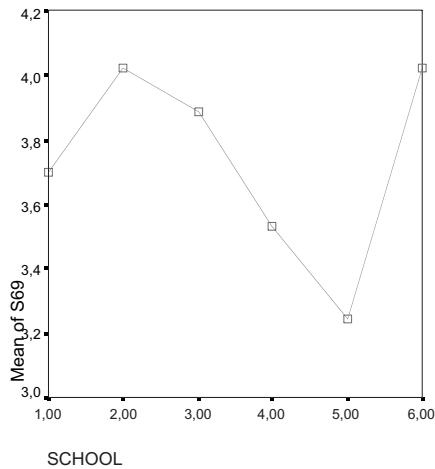
Figure 3. "Needing a quiet environment" and schools.



If Holland is excluded, the other universities score similar.

The fourth most frequently used item is listening carefully and the results are below. Generally speaking Turkish students do well here but Spanish students excel all in listening carefully.

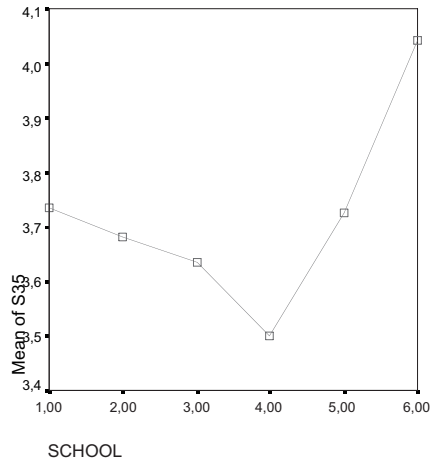
Figure 4. "Listening carefully" and schools.



Turkish students score high. Holland gets the least score and Spain the highest.

The fifth most frequently used item is “asking friends if there are problems” . Belgium has the highest score and for the first time two Turkish schools are left behind and they get lower scores than their European counterparts.Holland gets the lowest as usual.

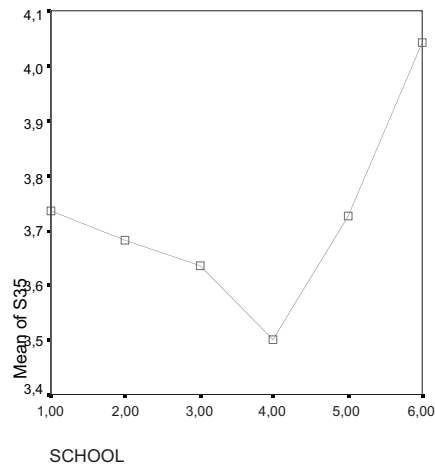
Figure 5. “Asking friends if there are problems”.



There is a very striking difference regarding the affective strategy of asking friends in terms of schools.

The sixth item with the highest means is a positive attitude. Spain and Holland have the highest positive attitude. Turkish universities score alike.

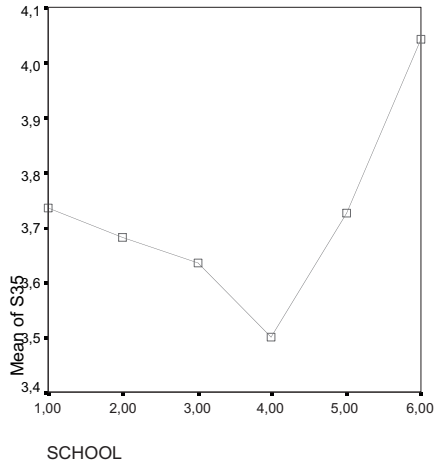
Figure 6. Positive attitude and schools.



The students from Holland and Spain have a more positive attitude than the others.

The seventh item with the high means is studying the course despite their dislike. Pamukkale gets the highest score in perseverance and Holland the lowest.

Figure 7. Perseverance and schools.



Turkish students are more successful in studying although they dislike the class.

When the subcategories of the scale are analysed the distribution is given below:

Table 3. The Means and Standard Deviations of the Subcategories.

		N	Mean	Std. Deviation
STOP	DEU	83	3,1409	,31431
	Celal Bayar	50	3,0168	,24255
	Pamukkale	71	3,0382	,22705
	Belgium	64	2,8893	,18974
	Holland	33	2,7058	,20327
	Spain	47	3,0345	,22972
	Total	348	3,0002	,27412
Test strategies	DEU	82	2,8927	,37836
	Celal Bayar	50	2,6600	,43284
	Pamukkale	71	2,7620	,37735
	Belgium	64	2,6234	,39107
	Holland	33	2,4152	,37259
	Spain	47	2,8191	,42510
	Total	347	2,7274	,41639

		N	Mean	Std. Deviation
Info processing	DEU	83	3,4287	,41199
	Celal Bayar	50	3,5383	,42565
	Pamukkale	71	3,3920	,62256
	Belgium	64	3,2370	,39458
	Holland	33	2,9773	,43465
	Spain	47	3,4291	,45841
	Total	348	3,3590	,49063
Attitude	DEU	83	2,7786	,63086
	Celal Bayar	50	2,5450	,53498
	Pamukkale	71	2,5775	,44288
	Belgium	64	2,4473	,30925
	Holland	33	2,4470	,35082
	Spain	47	2,5638	,49031
	Total	348	2,5826	,49919
Concentration	DEU	83	3,2265	,50342
	Celal Bayar	50	3,0480	,47391
	Pamukkale	71	3,1718	,46879
	Belgium	64	3,2000	,37033
	Holland	33	3,1030	,48508
	Spain	47	3,0468	,43181
	Total	348	3,1489	,46083
Time	DEU	83	3,2565	,94201
	Celal Bayar	50	2,9629	,42693
	Pamukkale	71	2,9416	,38980
	Belgium	64	2,8460	,34461
	Holland	33	2,8788	,46855
	Spain	47	2,8815	,29386
	Total	348	2,9881	,58609
Motivation	DEU	83	3,1245	,46038
	Celal Bayar	50	2,9567	,42832
	Pamukkale	71	3,0516	,51762
	Belgium	64	2,9271	,39494
	Holland	33	2,7424	,53537
	Spain	47	3,0887	,39141
	Total	348	3,0081	,46681

The means and standard deviations of the subcategories according to schools except for “concentration”, there is a significant difference among schools in all the subcategories. Turkish students seem to be more careful and use more test strategies and process information better. Especially the students at Dokuz Eylul University tend to persevere more and study harder even though they dislike the class. Turkish students score high in concentration skills. All students except for Holland are very well motivated. Turkish students make use of more study aids and use more reading strategies such as underlining and finding out the main idea. Holland comes last and Spanish students score high as well.

The researcher then turned to the question of whether the LASSI profile of students who perceived their ability to be high differed from that of students who perceived their ability to be low. To address this question, students were divided into two groups on the basis of a median split on the measure of perceived ability. The median score for this variable was 3. Students with above-median scores on this measure (i.e., the high perceived ability group) reported using more strategies than students with below-median scores (i.e., the low perceived ability group) on all the 8 subscales of the LASSI.

Descriptive statistics for the perceived ability variable, including the means and standard deviations for the high and low perceived ability groups created, are presented in Table 4.

*Table 4. Means and Standard Deviations for the Perceived Ability Variable for the Different Student Groups.*

Perceived Ability	M	SD
Total	3.49	.73
High	4.00	.60
Low	2.65	.39

#### 4. DISCUSSIONS

The results of the Learning and Study Skills Inventory given to the senior students of English departments at Dokuz Eylul University, Celal Bayar University, Pamukkale University (Turkey), Nijmegen, (Holland) , St Lieven (Belgium) and Alcala University (Spain) indicate that language learners differ in terms of some strategies such as underlining , asking friends when they do not understand, having a positive attitude , motivation, perseverance, anxiety whereas all groups need a quiet atmosphere to study. Belgian students get higher scores but this does not constitute a radical statistical difference, which shows that students concentrate better in the quiet places. Turkish students listen to the teacher very carefully. This might be related to the groups’ tendency to make use of the teachers and their trust in the teachers. Dutch and Belgian students show high frequency in group work. There is a significant difference regarding the strategy “asking friends when they have problems”. Belgian and Spanish students score high because they study in groups more and they conduct the courses in cooperation with one another, whereas Turkish students prefer their teachers to pose questions rather than their peers because they see the teacher as the centre of learning as the source of knowledge and authority. For the first time Holland has almost as high scores as Spain in attitudes. This

can stem from the fact that they have intrinsic motivation, and they have love for the teaching profession. Belgian students do not have positive attitude to learning in classes, they have less trust in teachers and prepare for their classes at home without attending the classes. Turkish students study their classes even though they do not like the class, they are believed to be more perseverant. West European students study when they know why they are studying and they can get a passing grade. Turkish students do not question why they are studying and study all the classes even though they think it has no value for them when they become teachers. For the present, it is also difficult to rule out the possibility that the Turkish students are so deeply committed to their learning. The finding that the Turkish students seem to score somewhat higher on the Attitude subscale than European students indicates that the Turkish students more generally regard school as something relatively important and worthwhile in their lives; that is, in accordance with their other goals and attitudes.

It should, of course, be cautioned against imputing generalizability of results based on a convenience sample like the one used in this study. However, there is no reason to believe that The Turkish student teachers are very different from other European student populations entering college. Generally, only high-achieving students are able to compete for admittance to Turkish university programs. However, for the sake of the cross-cultural comparison, it is better to have a better description of the types of students who served as the norming sample for the LASSI. Students in Holland, Belgium and Spain choose the teacher training departments without having to enter the university entrance exam.

In addition, it was found in this study that students with high perceived ability reported using more learning and study strategies than students with low perceived ability. There was a marked difference between students with high and low perceived ability when the profiles of the two groups were compared across the LASSI subscales. Moreover, the MANOVA procedure confirmed that there was a main effect for perceived ability, with significant differences in favor of the high perceived ability students found on the Time Management, Anxiety, Concentration, Information Processing, Selecting Main Ideas, and Test Strategies subscales of the LASSI. Thus, this investigation confirms the results of several studies, indicating that the use of learning and study strategies is related not only to the actual ability level of students, but also to their level of perceived ability (Ames & Archer 1988; Pintrich & De Groot 1990). One limitation to the finding is, however, that the construct of perceived ability was assessed by a single-item measure. Although other important studies have effectively used only one item to capture this construct (Ames & Archer 1988), this, of course, makes it possible to question the reliability of our perceived ability measure. Other measures of perceived ability that contain more items should therefore be used in future attempts to replicate the finding of the present study. Moreover, both perceived ability and learning strategies were assessed by self-report instruments measuring student perceptions. This makes it possible that the relationship found between perceived ability and learning strategies was, in part, an artifact of the manner in which they were measured. In future attempts to replicate the finding of the present study, self-reports of learning strategy use should therefore be supplemented with other methods of measurement (Garner 1988; Garner & Alexander 1989; Winne, Hadwin, Stockley, & Nesbit 1997). Given these limitations, this finding may still be interpreted in support of the view that students' perceived ability is an important motivational factor in their strategy use (Braten & Olausson 1998).

## 5. CONCLUSIONS AND IMPLICATIONS

When the subcategories of the LASSI scale are analysed, Turkish students show the following manifestations:

1. Students cannot transfer the knowledge. Just because they are exposed to English only at schools, they find no other way to transfer what they have learned in the classroom situation to the real life whereas in West European learners are exposed to English everywhere from the street to the radio stations and TV channels. It is true that Turkish learners use more strategies but a strategy is useful if the following conditions are present: "(1) the strategy relates well to the L2 task at hand; (2) the student employs the strategy effectively and links it with other relevant strategies for doing the task; and (3) the strategy coordinates with the student's general learning style preferences to one degree or another: such conditions make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations (Oxford 1990: 8). The first step is to identify a familiar word in one's own language that sounds like the new word—this is, the 'auditory link'. The second step is to generate an image of some relationship between the new word and a familiar one—this is, the 'visual link'. (Oxford, 1990; pp. 41-42) The keywords strategy can be more powerful for some learners, than sounds or images used independently. Suggesting this strategy to a student who currently uses one of these approaches can build upon their experience of the known strategy in the introduction of the new keywords strategy. For example, a student who makes notes, summaries, or uses highlighting may find it useful to employ the grouping strategy, a memory strategy, to help bring order to their material. This is a one-way link, as a student who uses grouping will already successfully be using some kind of strategy to determine the material that they group together.

2. They have a high level of anxiety. The mean for Turkish students is 3.3 whereas for the European students this is 2.5. When high levels of anxiety are reduced, a student's desire to learn and ability to acquire knowledge increases. Further, anxiety reduction can lead to dramatic improvements in academic success. For example, Bogue (1993) emphasizes «regaining control,» since anxiety is associated with a lack of control. The student can work with their professor or learning advisor to determine ways to gain control over their academic responsibilities. She also challenges students to «overstudy»-doing assignments early, reading all recommended materials, studying with friends or «peer helpers» (Sciarini, Gross & Woods, 1997), sitting in the front of the class, arrange frequent conferences with the professor, and visiting the campus learning center. Schools should find a way to lessen the anxiety as well. Group works are recommended (Coke, 2005) because as Walsh & Ugumba-Agwunobi (2002) hold test anxiety, fear of failure reduce the achievement in the class. Humor, real life situations and group work activities are well documented in the works of Fortre (1995). Pan & Tang (2004) and Boud & Feletti (1991) recommend some new testing criteria such as projects, assignments, problem solving instead of the traditional ways of preparing a test and giving it to students. Even the criteria such as pass /fail is better to reduce the anxiety. Assignments can be given on a regular basis and can constitute the evaluation grade (Forte 1995; Pan and Tang 2004, and Wilson 1998). Group work has many advantages apart from lessening the anxiety among learners. Honigfeld and Dunn (2003: 195) believe that this technique motivates students more and fosters cooperation. Many students express that they get more benefit from the group work studies and learning become smore meaningful (Payne & Monk-Turner 2006).

Turkish students do not enjoy working with their friends. If such group work activities are implemented in the class, it is possible for students to learn how to cooperate, collaborate and feel less anxious.

3. They are poor at employing metacognitive strategies. They have no awareness of the use of the metacognitive strategies which are used abundantly by European learners. Several distinguished educators believe that the highest priority for today's college educators should be making their students effective «lifelong learners.» That will provide their students with the ability to readily acquire new skills as they become necessary.

Educators in a variety of fields agree that the specific knowledge and skills acquired through formal education are becoming less important than a willingness and ability to seek new knowledge and understanding (Haywood 1989; Sizoo & Agruso & Mat 2005). Malcolm Knowles, the late guru of adult learning said, «In a world in which the half-life of many facts (and skills) may be ten years or less, half of what a person has acquired at the age of twenty may be obsolete by the time that person is thirty. Thus, the main purpose of education must now be to develop the skills of inquiry» (1975:15). Management philosopher Peter Drucker agrees, noting, «A knowledge worker needs one thing only: to learn how to learn.» (Rubin, 1998 : 67; Pickworth, Shaw & Barth 1997). Increasingly, it is felt that successful graduates will be those who are prepared to be lifelong learners. That is, throughout their career, they will be prepared to acquire the skills they need to succeed in a rapidly changing environment. To do this, the students (and their instructors) need to know how well they learn today. In that way, they can build on their learning strengths and neutralize their weaknesses.

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