

## Evaluation of Study Approaches and Skills among the Students of Payame Noor University

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### Abstract

The main purpose of the study was to examine the approaches and skills of study among the students of Payame Nour University. The statistical society included 2857 girl and boy students of Khalkhal Payame Nour University in 2013 school year that 160 persons of them were selected as the sample through classical sampling method and by Morgan table. To examine the research, "the study approaches and skills of students of Pask" with 52 questions of five option Likert Scale has been used which refers to three approaches of deep, strategic and surfaced. The research data was analyzed by using of descriptive statistical methods (Pearson correlation coefficient) and inferential statistics (T test and the analysis of single factor variance). The research findings indicated that in examine of the relation between the age and the study skills, the meaningful level of the test was less than the standard limit of 0/05 and this shows that there is a meaningful relation between them. This means that as the students' age goes higher, the boy students tend to the deep and strategic approaches and the girl students tend to the surface approaches more. The meaningful levels of the test in deep and strategic skills are orderly 0/004 and 0/003 less than the standard limit of 0/05. Therefore, there is a relation between the age and the deep and strategic skills. But there is not a relation between the age and the surface skills because of the large meaningful level of 0/18. In addition, in examining of the study approaches and skills, all of the items were less than the standard limit of 0/05 and they were 0/000, and their correlation coefficient calculated between 0/59 and 1 which indicate a meaningful relation among three study approaches.

**Keywords:** The study approaches, deep, strategic, surfaced, learning

### 1. Introduction

The root of the human life is based on learning. Learning is an internal treasure and an endless wealth. Different factors such as intelligence, aptitude and assiduity are effective in learning; but one of the most important factors of these is the study approaches and skills (Wakilian, 2010). The approaches and styles of studying refer to the matter that the people understand, classify and analyze the data in different ways; because they may encode, store, process, manipulate and retrieve data in various forms due to individual differences, experiences, knowledge, different interests, intelligence and character (Aaron, S. & Shaken, 2008). In fact, each person has a preferred or usual method for his/ her studying and learning; thus, the study approaches are the methods which the contents and data are encoded, stored, processed, manipulated and retrieved through them in order to improve learning (Kharamie Nouri, 2011). The concept of the study approaches and skills for the first time was presented by Pask for scientific justification of the studying in three categories of deep, strategic and surface skill. The deep approach is along with the researching and making the meaning, cerebrotonia and expanding cogitation (Emami Pour, S & Shams, 2009), obligation and interestedness, questioning, general looking, hypothesis testing, learning style depended on the field, training style which tends to construction and deliberative thinking style. The strategic approach deals with the regular study, time management, attention, focus and intellect, controlling and supervising the results, self-control, working hard, sedulity, creating motivation in oneself, the learning style depended on the field, the meta cognitive training style and legislator thinking style (Byrne, M. B. Flood & Willis, 2002); and also the surface approach pays attention to psittacine retention, aimlessness, closed curriculum which is resistant to the teacher, and the fear of educational failure, learning style uncommitted to the field, behavioral training style and impulsive thinking style (table 1).

**Table 1: features of study approaches and their relation with the types of educational, learning and thinking styles**

Features of surface approach	Features of strategic approach	Features of deep approach
aimlessness psittacine retention closed curriculum which is resistant to the teacher the fear of educational failure tending to the result converge thinking	Regular study Time management attention, focus and intellect Controlling and supervising testing theoryself-control, working hard, sedulity creating motivation in oneself	searching and making the meaning cerebrotonia and expanding cogitation creating theory obligation and interestedness being questioner being general looker deliberative thinking style
styles	Styles	styles
learning style uncommitted to the field behavioral training style impulsive thinking style	learning style depended on the fieldthe meta cognitive training style legislator thinking style	learning style depended on the fieldtraining style which tends to construction deliberative thinking style

In addition, people process the information in three ways of deep, strategic and surfaced (Seifort, 2003). Ascensional processing is the subset of the surface approach, descending and consecutive processing is the subset of the deep approach and the parallel processing is the subset of the strategic approach. The deep approach depends upon the time of learning, semantic extension, attention and awareness, positive solutions, exercise and repetition, motivation (Jones, 2003), creating theory, questioning, researching, general looking and hypothesis testing (Seef, 2007). the strategic approach depends on time management, regular study, careful planning, control and supervising, working hard, sedulity; While the surface approach depends upon retention, closed and limited curriculum, aimlessness, competition questing, inability in understanding theories, problem in understanding contents and the sensation of tiredness and fear about educational failure. Selecting appropriate study skill which fits internal abilities and desideration of the learner leads to creating interest in the readable content and this cause the learner study more and more. Also, more study leads to improve study skills, better study skills usage, easier and pleasurable study; thus, the interest of the reader increases about study (Seef, 2007). So, if the study approaches are selected well, they can decrease the time of the study, increase the rate of learning, lengthen the time of maintaining the contents in the mind, and make easy memorizing the information. Seef in a research describes the methods of study such as pre-reading, questioning, repeating, testing and reviewing effective, because in one hand they organize the contents and on the other hand they lead to learning contents part to part. Based on the above this research is to solve the following questions:

What are the study approaches and skills among the students of Payame Nour University?

Is there any relation between the study approaches and the gender of the students?

Is there any relation between the study approaches and the age of the students?

Is there any relation between the study approaches of the students with each other's?

## 2. the research method, the statistical sample and society

The current study is from the kind of descriptive measurement and the statistical society includes 282 persons of the students of medical science college of Khalkhal in 2013 school year that 160 persons of them were selected as the sample using classical sampling method through the Morgan Table. Also, the research data were analyzed with the help of the SPSS software and using the descriptive statistics (Pearson correlation coefficient) and illative statistics (T test and single factor variance analysis).

### Measurement tools

To measure the types of study approaches of the students, the analysis of approaches and study skills inventory for students (ASSIS) questionnaire of Pask based on Likert five degree scale was used which contained 52 questions of three skills of deep, strategic and surfaced. This questionnaire can be used as a useful tool in the teaching – learning conditions (Fahle, 2003). The perpetuity of the test was gotten 0/85 through the Cronbach's alpha which indicates that it has a high perpetuity.

### 3. The research findings

#### The first question: What are the study approaches and skills among the students of Payame Nour University?

To resolve the first question about what the study approaches and skills among the students of Payame Nour University are, the review- analytical method was used. The major approaches and adjunct scales related to each of the study skills among the students are mentioned in table 2.

**Table 2: the types of the study skills among the students of Payame Nour University**

Features of each approach	Types of study approaches
Searching the meaning	Deep
Relating beliefs and concepts to each other	
Using documents and evidence	
Interesting in topics	
Management of organization	Strategic
Consciousness about evaluating excepted learning works	
Organized study	
Supervising effectiveness	
fear of failure	Surfaced
Obligation on titles of curriculum	
Retention of meaningless contents	
Aimlessness	

The second question: Is there any relation between the study approaches and the gender of the students? In order to determining the relation between the gender and the types of study approaches ANOVA was used.

**Table 3: the relation between the study approaches and the gender of the university's students**

Double sides error	Mono side error	Average of squares	Freedom degree	Total of the squares	indicator
0/013	2/3	%45	10	4/5	Among the groups In the group's total
	2/3	%19	149	28/8	
	---	---	159	33/3	
0/008	2/5	%44	10	4/4	Among the groups In the group's total
	2/5	%174	149	26/1	
	---	---	159	0/530	
0/008	2/5	%59	10	5/9	Among the groups In the group's total
	2/5	%23	149	34/8	
	---	---	159	40/7	

Because the meaningful level of the test in all the three components is less than the standard limit of 0/05 and is

0/000, so there is a meaningful difference between the study approaches of the students and the gender of them.

**The third question: Is there any relation between the study approaches and the age of the students?**

Determination of the relation between the study approaches and the age of the students: the regression test has been used to examine the relation between the study skills of the students and their age.

**Table 4: examining the relation between the age and the study skills of the students**

Test error	T score	Standard error	Beta score	The approaches
0/004	2/9	0/66	0/37	<b>deep</b>
0/003	-1/4	0/63	- 0/17	<b>strategic</b>
0/18	-1/3	0/50	-0/14	<b>surfaced</b>

Due to this fact that the meaningful level in the deep approach and the strategic approach are orderly 0/004 and 0/003 which both of them are less than the standard limit of 0/005, so there is a relation between the age and the deep and strategic skills. But because of the large meaningful level of 0/18, there is not any meaningful relation between the age and the surface approach. Also, the Beta test score as the linear slope in the deep skill is positive and 0/37, that is to say that as the students' age goes higher the usage rate of the deep skill goes higher, too.

**The fourth question: Is there any relation between the study approaches of the students with each other's?**

To examine the rate of relation between the three skills of deep, strategic and surfaced, the correlative coefficient was used.

**Table 5: examination of correlation between the three study approaches of the students**

deep	surfaced	Variant	The study approaches
1	0/67	Correlative score	<b>deep</b>
0/000	0/000	Error	
160	160	Numbers	
0/74	0/59	Correlative score	<b>strategic</b>
0/000	0/000	Error	
160	160	Numbers	

In this evaluation, the test error is less than standard limit of 0/05 and is 0/000 in all of the cases and the correlation coefficient between them is calculated between 0/59 and 1 which indicates a meaningful relation among these three skills. In other words, as the performance of one of the study approaches goes higher, the performance of other approaches go higher and vice versa, too.

**4. Discussion and Conclusion**

The study skills are one of the most important effective items on the stable learning of the students. In terms of the learning styles, the study skills are divided into three groups of deep, strategic and surfaced. In the deep skill the process is of the kind of descending which depends upon the cognition processes of high level of thinking, knowledge and old experiences and the expectations of oneself; in other words, in descending process the movement is from up to down or from the problem to the problem solution which this kind of process is compatible with the modern educational approach of group discussion and social participation. In strategic approach, the processing is of the kind of parallel which deals with planning, organizing, controlling and supervising on the learning content. In surface skill, the processing is of the kind of ascending which the contents are processed one after another and from down to up in it. Another point is that the study skills have relation with the modern methods of learning including mood, understand, recall, digest, detect, expand and review (murmur) and according to the consequences of Seef's researches these methods effect on the deep and meaningful learning in the learners (Seef, 2007). To answer the question that was: what are the study approaches and skills among the students of Payame Nour University? The method of review analysis was used which divides the study skills into three group of deep, strategic and surfaced.

To answer the second question of the research whether there is any relation between the study skills and the gender of the students, the ANOVA was used. Since the meaningful level of the test in all three items was less than the standard limit of 0/05 and it was 0/000, there is a meaningful relation between the gender and the study approaches of the students. In other words, the boys tend to deep and strategic study approaches and the girls tend to the surface study approach.

To answer the third question to see whether there is a relation between the study skills and the age of the students, the correlative coefficient was used; since after the analysis the meaningful level of the test in the deep skill and the strategic skill orderly were 0/004 and 0/003 and less than the standard limit of 0/005, there is a meaningful relation between the age and the deep and the strategic skill. But, there was not any meaningful relation between the age and the surface approach because of the large meaningful level of 0/18. That is to say that as the age goes higher, the students tend to the deep and strategic approaches more, and this consequence is compatible with the results of Aaron and Shaken's research who believe that the very surfaced learning is in the entrance test of the university at the lower ages and the deep learning with the aim of understanding and thinking is for the higher ages at the university (Aaron and Shaken, 2008).

To answer the fourth question on whether there is a relation between the study skills with each other, the correlation coefficient was used. Since the test error in all of the vases was 0/000 and less than the standard limit of 0/005 and also the correlation coefficient of them have been calculated between 0/59 and 1, these indicated that there is a meaningful relation among these three study skills. In other words, as the performance of one of the study approaches go high, the performance of the other approaches increase and vice versa, too. This consequence is compatible with the results of Mayer's research on the case that if the performance of the students in the first year of the university in the surface approach is low, proportionally the performances of the other approaches will be low and vice versa; if the students show interest and obligation in learning, proportionally the tendency to the deep and strategic approach will go high (Mayer, 2004)

Also, the ultimate consequence of the research indicated that the study methods of the students regard to the age and the educational field, knowledge and old experiences and learning styles are different. Some of them are deep looker, some are strategist and some other are surface looker, but the best and right method of the study is using the deep and strategic skills which deal with the correct processing of information, questioning, hypothesis testing, researching and making the meaning, theorizing, planning, organizing and supervising the contents, while the surface skill is the weakest method of study which will have the least impact on the meaningful learning of the students.

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