



**INVESTIGATING THE CORRELATION BETWEEN THE STUDY SKILLS AND
ACADEMIC PERFORMANCE IN MASTER STUDENTS AT ISLAMIC AZAD
UNIVERSITY OF SARI**

MOHAMMADVAFAEENEZHAD¹, SAFIYEH TAHMASEBI LIMOONI^{2*}

1,2: Department of Knowledge and Information Science, Babol Branch, Islamic Azad
University, Babol, Iran

*Author for Correspondence: Sa.tahmasebi2@gmail.com

ABSTRACT

The aim of this study is to Determining the correlation between the study skills and academic performance in master students at Islamic Azad University of Sari. This research has analytical-survey type. The standardized Study Skills Inventory by Banville, Desrosiers and Janet-Walt (2000) is the research tool in this study. The reliability of inventory is equal to 0.76 based on Cronbach's alpha. The statistical population consists of 373 subjects (out of 9216) from the master students at Islamic Azad University of Sari during the academic year of 2014-15. The students' GPA is utilized to measure the academic performance. The data analysis is performed through the descriptive statistics (calculating the frequency, percentage of frequency, column chart, mean and standard deviation) and inferential statistical of Pearson correlation coefficient test, one-sample t-test and Kolomogrov-Smirnov test by SPSS 20 software. The results indicate that there is a significant positive correlation between the study skills (0.654) and dimensions of reading skills (0.493), noting (0.572), enhanced memory improvement (0.559), preparation for exam (0.568), increased focus (0.422) and time management (0.568) with academic performance in students ($\text{Sig} < \alpha = 0.01$). There is a significant correlation between the study skills and academic performance in students at Islamic Azad University of Sari, so that the level of academic performance in Islamic Azad University students is increased by enhancing the study skills.

**Keywords: Study skills, academic performance, Master, Islamic Azad University of
Sari, students**

INTRODUCTION

Some of the students attribute their academic failure to factors such as the lack of talent, lack of resources and bad luck, while we can certainly argue that the familiarity with study skills and learning is the most important factor in academic success. Most of the students and learning enthusiasts frequently ask the teachers how we should study for better organization of subjects in our mind. Should we study early in the morning or at night? Should we study loudly or quietly? With respect to the experiences and scientific methods, the cultural pioneers recommend the methods [15].

By understanding, applying or providing the study conditions we can have the more beneficial and with higher efficiency study. In fact, these conditions teach the students how to have higher productivity by using the study time. They teach us what principles apply before study, what issues provide during the study, and how to achieve the study goals.

The effective study depends on two factors, the interest in reading subjects and skillful use of study techniques. Due to the interest in reading subjects, the person study more and thus the further study lead to better application of techniques [18].

According to the findings by Baylor and Snowman (1993), those who had used the

study skills, were better in reading and understanding the contents. The use of study skills can make the study more useful and achieve its desired target because the study skills assist the students to understand what they read, to remember them and have the ability to express them for others[1].

Therefore, this research is seeking to investigate the correlation between the study skills and academic performance in master students at Islamic Azad University of Sari. As one of the most important chapters of this thesis, this chapter provides the necessary information for other researchers and enthusiasts to understand the general and specific objectives by describing the problem and mentioning the immediate and future benefits and the need to conduct the research in the section of research importance and necessity. Afterwards, this chapter introduces the research variables and finally this chapter ends by expressing the definitions of variables theoretically and operationally (practically).

Research benefits and importance

An overview of current development in higher education system indicates that the higher education should pay attention to the crisis of increased quantity and financial bottlenecks as well as maintaining and improving the quality promotion. The evidence also indicates that this system will

ensure its responsibility, duties and goals if it is in the desired situation in terms of educational quality [9].

Training the efficient human resources is among the main duties of universities. The students are among the valuable capital of any country and it is extremely important to train them in terms of science, research and culture; furthermore, the proper planning in educating them is among the main duties of universities. The universities accept the new students and graduate some students every year, and it is very important to take into account the educational quality in this continuous cycle [6].

The educational failure is among the problems of educational system in all educational classes and wastes the manpower and spent costs (Holmberg, 1985). On the other hand, the graduates, who have passed the university with educational failure, will not desirably obtain the required scientific knowledge [10].

The productive study depends on two factors of interest in reading subject and skillful application of study techniques. Because of the interest in reading subject, the person reads more, and also the application of study techniques makes the study easier, faster and more enjoyable. Consequently, the reader becomes more

interested in study and does not refuse to read the necessary contents [18].

Since the introduction and development of study skills by students and especially the master students, most of whom are educating in addition to the important time-consuming matters such as the employment, livelihood, children education, and handling the educational affairs, marriage, and so on, can raise their academic performance, investigation of relationship between the study skills and academic performance in master students at Islamic Azad University of Sari is essential because:

- It theoretically will increase the knowledge domain in this field.
- It determines the amount and direction of relationship between the variables.
- It determines the master students' familiarity with the study skills.
- It practically provides the determination of amount, type and direction of relationship, the possibility of doing the necessary plans for authorities and planners at Islamic Azad University in order to reduce the deficiencies such as the educational failure and prevent the prevalence of further problems in this regard.

Therefore, since the same study is not conducted at Islamic University of Sari or at least the results of conducted studies have not been available to other researchers, the results of this study can be applied by students at Islamic Azad University of Sari especially the master students and others interested in this research area.

MATERIALS AND METHODS

This research is applied in terms of objective and survey-analytical in terms of data collection method; it has the two-variable correlation type in terms of analysis. The statistical population consists of all 373 master students (out of 9216) at Islamic University of Sari during the academic year of 2014-15 according to Kerjeie and Morgan Table. The Study Skills Inventory (SSI) by Banville et al (2000) is utilized to collect the required information and it includes 50 questions with 5-point Likert scale (Always with score of 1, more often, often, sometimes or rarely (with score of 5), and its reliability and validity are assessed and the Cronbach's alpha coefficient is used to assess the reliability.

In all cases, its value has been higher than 0.7 indicating the reliability of questions. The descriptive and inferential statistics are utilized to analyze data through SPSS 22 software.

RESULTS

The subjects' gender frequency and percentage of frequency in this research indicate that 67% of subjects are men and the remaining 33 percent are women. Furthermore, 34% of the whole respondents have from 31 to 35 years of age (maximum frequency) and 14% are 41 and older (minimum frequency). 70% of them are educating in Faculty of Humanities, 28% in Faculty of Basic Sciences and technical and engineering and the other 2 percent in Faculty of Medical Sciences. The majority of subjects studied in this research are educating in the field of psychology (84 ones equal to 23 percent).

Responding to research hypotheses

First hypothesis: There is a significant correlation between the students' study skills and academic performance.

- The statistical hypotheses are as follows for testing the main hypothesis:

H_0 : There is no significant correlation between the students' study skills and academic performance.

H_1 : There is a significant correlation between the students' study skills and academic performance.

Or mathematically, we have:

$$H_0 = \rho = 0$$

$$H_1 = \rho \neq 0$$

The results of data investigation in Table 1 indicate that data rejects the null hypothesis (H_0) and approves the research hypothesis (H_1) at the confidence level of 99% ($\alpha=0.01$), as ($\text{Sig} = 0.000 < \alpha=0.01$). Therefore, it can be concluded at the confidence level of 0.95 that there is a significant correlation between the students' study skills and academic performance.

Second hypothesis: There is a significant correlation between each dimension of study skills (separately) and academic performance in students.

- The statistical hypothesis for testing the hypothesis 2 are as follows:

H_0 = There is no significant correlation between the dimensions of study skills and academic performance in students.

H_1 = There is a significant correlation between the dimensions of study skills and academic performance in students.

Or mathematically, we have:

$$\begin{cases} H_0 = \rho = 0 \\ H_1 = \rho \neq 0 \end{cases}$$

The results of data investigation in Table 2 indicate that the data rejects the null hypothesis (H_0) and approve the research hypothesis (H_1) at the confidence level of 99% because $\text{Sig} = 0.000 < \alpha= 0.01$. Therefore, it can be concluded at the confidence level of 0.95 that there is a significant correlation between each dimension of study skills (separately) and academic performance in students.

Table 1: Investigating the correlation between the study skills and academic performance in students

Variables	Academic performance	
	Statistical indices	Computing values
Study skills	Total	373
	Correlation coefficient	0.654
	Significance level	0.000

Table 2: Investigating the correlation between the dimensions of study skills and academic performance in students

Dimensions of study skills	Academic performance		
	Total	Correlation coefficient	Significance level
Skill of reading the texts	373	0.493	0.000
Skill of noting	373	0.572	0.000
Skill of memory improvement	373	0.559	0.000
Skill of exam preparation	373	0.568	0.000
Skill of increased focus	373	0.422	0.000
Skill of time management	373	0.568	0.000

DISCUSSION

Any scientific research is conducted based on a specific purpose; in other words, the researcher's objective is either fundamental, which develops the domain of knowledge, or practical which solves the problem or

promotes the level of quality and quantity.

In applied and practical studies, the researcher should offer the practical strategies based on the obtained results (Sarmad et al, 2014). The aim of this research is to determine the correlation

between the study skills and academic performance in master students at Islamic Azad University of Sari. However, other six sub-goals are determined within the framework of main goal. To respond to the research hypotheses and questions, the master students at Islamic Azad University of Sari are considered as the statistical population, and a sample proportional to the size of research population is selected from the statistical population, and the information is collected from the population of students through the questionnaire. The following results are obtained after data analysis. Here, the conclusion and discussion of this research are provided and finally the suggestions offered.

According to the investigation of First hypothesis, the result indicates that there is a significant correlation between the students' study skills and academic performance. It can be interpreted that the students' academic performance can be improved by strengthening their study skills as the increase in their study skills will increase the academic performance and vice versa. These results are consistent with the findings of local research by Badeleh, Hosseini, Jafari, Charkazi and Bakhsha [3], Abazari and Rigi [1], Abdkhodaei and Ghaffari [2], Javadi, Keyavanara, Yaghoubi, Hassanzadeh and Ebadi [8], and Salehi and

Enayati [15], and the findings of foreign research by Serin, Serinb, and Sahinc [19], Fergy, Morgan and Hodgson (2008), Macnamara and Penner [11], and Honter and Linder (2005). Therefore, according to the results of this research and the conducted local and foreign studies in this regard, the students, who are more capable of taking advantage of study skills, have significantly higher academic performance, and thus their educational failure is significantly reduced. Therefore, strengthening and educating the study skills are the main ways which can help the students to cope with educational failure which has the adverse economic effects in addition to the negative impact on the students' intellectual abilities and physical and mental health. Therefore, observing the study skills assessed in this study (skills of reading the texts, noting, memory improvement, exam preparation, increased focus and time management) in the field of students' study can reduce the educational performance failure. This requires teaching these skills to students and fundamental culture making from the primary school. Furthermore, the cooperation between the audiovisual media and the development of further studies in this field and sharing them will be also very helpful.

The results of second hypothesis indicate a positive and direct correlation between

each dimension of study skills (skills of reading the texts, noting, memory improvement, exam preparation, increased focus, and time management) with academic performance in students. In the field of first dimension, these results indicate that the students can strengthen their own reading skills in order to improve the academic performance because the rate of academic performance is enhanced by increasing the reading ability and vice versa. Furthermore, these results are consistent with the findings of local research by Badeleh, Hosseini, Jafari, Charkazi and Bakhsha [3], Abazari and Rigi [1], and Salehi and Enayeti [16], as well as the foreign studies by Serin, Serinb, and Sahinc [19], and Honter and Linder (2005). Therefore, it seems that the students' accuracy in understanding makes their interpretation of textbooks and other contents prepared for new ideas and information which strengthen their reasoning and thinking methods. This ability will be certainly effective to improve their academic performance and this study approves this issue. For second dimension, the results indicate that the students can improve their own academic performance by strengthening their noting skill, because the increased noting skill will enhance the academic performance and vice versa. Furthermore, these results are

considered with the findings of local research by Badeleh, Hosseini, Jafari, Charkazi and Bakhsha (2013), Javadi, Keyvanara, Yaghoubi, Hassanzadeh and Ebadi (2010), Haqqani and Khadivzadeh (2009) and Nourian, Mousavinasab, Fahri and Mohammadzadeh (2006) and also the foreign studies by Serin, Serinb, and Sahinc (2009), Macnamara and Penner (2006) and Honter and Linder (2005). Therefore, since noting will organize the mind and mindfulness, this capability can lead to the criticism and achievement of content lying at the core of text or paragraph. Therefore, strengthening the noting skill will lead to the further focus in students to find the original meaning and key words and it would improve their academic performance. With regard to the results of this research and the local and foreign studies in this regard, the students who have the higher abilities to take the advantage of study skills, will substantially improve their academic performance, and thus their educational failure will be dramatically reduced. Therefore, strengthening and educating the study skills especially the noting skill are the main ways which can help the students to cope with the educational failure which has the adverse economic effects in addition to the negative impact on the students' intellectual abilities and physical and mental health. In

the third dimension of study skills, the results indicate that the students can improve their own academic performance by skill of memory improvement because the increased skill of memory improvement will enhance the academic performance and vice versa. Furthermore, these results are consistent with the local studies by Badeleh, Hosseini, Jafari, Charkazi and Bakhsha (2013), Abazari and Rigi (2002), Abdkhodaei and Ghaffari [2], Haqqani And Khadivzadeh [5], and Salehi and Enayeti [16], as well as the findings of foreign studies by Macnamara and Penner [11], and Honter and Linder (2005). Therefore, the strengthened skill of memory improvement will significantly help to enhance the students' learning ability and improve their academic performance.

The results also indicate that the students can improve their own academic performance by strengthening their skills of exam preparation because the increased skill of exam preparation will enhance their academic performance and vice versa. Furthermore, these results are consistent with the local research by Badeleh, Hosseini, Jafari, Charkazi and Bakhsha [3], Javadi, Keyvanara, Yaghoubi, Hassanzadeh and Ebadi [8], Rohani, Akbari and Mamavi [14], and Nourian, Mousavinasab, Fahri and Mohammadzadeh [13], as well as the foreign studies by Serin,

Serinb, and Sahinc [19], and Fergy, Morgan and Hodgson [4]. Therefore, the students' efforts for preparing during the academic year such as studying the textbooks, participating in class and semester tests, and participating in discussion presented by professors will make them ready to pass the final exam without any concern, anxiety and stress in exam day. These activities are certainly effective in improving the academic performance in students. Furthermore, the students can improve their academic performance by strengthening the skill of focus increase because the increase skill of focus increase will increase the academic performance and vice versa. These results are consistent with the findings of local studies by Badeleh, Hosseini, Jafari, Charkazi and Bakhsha [3], Abdkhodaei and Ghaffari [2], Javadi, Keyvanara, Yaghoubi, Hassanzadeh and Ebadi [8], Haqqani and Khadivzadeh [5], and Rohani, Akbari and Mamavi [14], as well as the foreign studies by Serin, Serinb, and Sahinc [19], and Macnamara and Penner [11]. Therefore, consolidating the thinking during the study and focus on the subjects will lead to their durability in mind, and also rehearsing will lead to learning that will eventually help to improve the students' educational performance. Finally, the results indicate that the students can improve their own

academic performance by strengthening their time management skills because the enhanced time management skill will increase the level of academic performance and vice versa. These results are consistent with the local findings by Badeleh, Hosseini, Jafari, Charkazi and Bakhsha [3], Abazari and Rigi [1], Salehi and Enayati [15], and Nourian, Mousavinasab, Fahri and Mohammadzadeh (2006) as well as the foreign studies by Serin, Serinb, and Sahinc [19], and Macnamara and Penner 11 Planning and controlling the study time and maximizing the time operation will increase the efficiency of study and reduce the distraction and careless. The time intended for resting also prevents the mind fatigue and will improve the memory. Therefore, the conditions will be provided to improve the students' academic performance.

for future research

It is suggested conducting the research by students, researchers, experts and scholars in the field of following topics:

- Conducting the similar research in this field at other universities and comparing their results.
- Conducting the similar research among the students in all educational courses separated according to the gender.
- Conducting the research with different measurement tools and methods such as the

observation and interviews along with the questionnaire.

REFERENCES

1. Abazari, Zahra, Rigi, Tahereh (2012). Investigating the study skills and habits in students at Zahedan University of Medical Sciences. *Health Management and Information*, 9 (6): 848-861.
2. Abdkhodaei, Mohammad-Saeid; Ghaffari, Abolfazl (2010). Investigating the students' levels of using the learning and study skills and its correlation with their academic status and background. *Educational and Psychology Studies*, Ferdowsi University of Mashhad, 11 (2): 211-226.
3. Badeleh Shamoushaki; Mohammad-Taghi; Hosseini, Seyed-Abedin; Charkazi, Abdolrahman; Jafari, Seyed-Yaghoub; Bakhsha, Fouzieh (2013). Study skills and their correlation with educational status in students. *Iranian Journal of Education in medical Sciences*, 13 (1): 66-71.
4. Fergy, S. & Morgan, G. & Hodgson, D. (2008). The impact of pre-entry study skills training programmers on students, first year experience in health and social care

- programmers. Nurse Education in practice: 20-30.
5. Haqqani, Fariba; Khadivzadeh, Talat. (2009). The impact of workshop education course of study skills and learning on the study strategies and learning in talented students. Iranian Journal of Education in Medical Sciences, 9 (1): 31-40
 6. Hazavehei, S.M.M; Fathi, Y.; and Shamshiri, M. (2006). Investigating some causes of failure from the perspective of students at Hamedan University of Medical Sciences during the academic year of 2001-2002. Steps of development in medical education, Journal of Center for Medical Studies and Development at Kerman University of Medical Sciences, 3 (1): 33-42.
 7. Holmberg, M.B. (1985). Longitudinal studies of drug abuse in a fifteen-years old population: 5 prognostic factors. Acta Psychiatr Scand, 71(3):207-10.
 8. Javadi, Marzieh; Keyvanara, Mahmoud; Yaghoubi, Maryam; Hassanzadeh, Akbar; Ebadi, Zahra (2010). The relationship between the meta-cognitive knowledge of study strategies and students educational status at Isfahan University of Medical Sciences. Iranian Journal of Education in Medical Sciences, 10 (3): 246-254.
 9. Kebriaei, A.; Roudbari, M. (2005). The gap of educational quality at Zahedan University of Medical Sciences: The students' views of current and desirable status. Iranian Journal of Education in Medical Sciences, 5 (1): 53-60.
 10. Lazin R, Neumann L. (1991). Student characteristics as predictors of drop-out from medical school: Admission to Beer-sheva over a decade. MedEduc, 25(5): 390-404.
 11. Macnamara, D. & Penner, K. (2006). Using study skills and motivation Predict academic success. Journal for research in mathematics education, (21), 33-46.
 12. Marnat, Gary Groth. (2003). Handbook of psychological assessment, Vol. 2, translated by Hassan Pasha Sharifi and Mohammadreza Nikkhah, Tehran: Sokhan Publications.
 13. Nourian, Abbasali; Mousavinasab, Noreddin; Fahri, Arezou; Mohammadzadeh, Akbar (2006). Skills and habits of study in medical students in Zanjan. Iranian Journal of Education in Medical Sciences, 6 (1): 101-107.

-
14. Rohani, Armita; Akbari, Majid; Mamavi, Tayyebeh (2008). Investigating the study skills in dental students in Mashhad. *Medicine and purification*, 19 (14): 63-73.
 15. Salehi, Mohammad; Enayati, Taraneh. (2009). The correlation between the main components of learning and study strategies with academic achievement in students at Islamic Azad University. *Quarterly Journal of New Approach in Educational Administration*, 2 (3): 145-162.
 16. Salehi, Mohammad; Enayati, Taraneh. (2009). Comparing the norm of learning and study strategies (LASSI) and its relationship with academic achievement in students. *Quarterly Journal of New Approach in Educational Administration*, 4 (3): 63-81.
 17. Sarmad, Zohreh; Bazargan, Abbas; and Hejazi, Elaheh (2014). *Research methods in Behavioral Sciences*. Tehran: Agah publications.
 18. Seif, Ali-Akbar. (2001). *Methods of learning and study*. Tehran: Doran.
 19. Serin, O., Serinb, N. B., Sahinc, F. S. (2009). Factors affecting the learning and studying strategies, and locus of control of the trainee teachers. *World Conference on Educational Sciences, Procedia Social and Behavioral Sciences*, 1: 1127–1136.