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## Study of Emotional Intelligence and Learning Strategies

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### Abstract

The present study investigates the relationship between Emotional Intelligence and Learning Strategies. The statistical sample of the study involves a random selection of 100 university students from different fields of study. For the purpose of data collection, the researchers administered two questionnaires: Bar-On questionnaire and Learning and Study Strategies Inventory (LASSI). The results show 1. There is a significant relationship between students' total emotional intelligence and learning strategies both in females and males. 2. There isn't a meaningful difference between students' Emotional Intelligence and their fields of study. 3. There isn't a meaningful difference between students' learning strategies and their fields of study. 4. There is a meaningful difference between males and females in the use of learning strategies.

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### 1. Introduction

Over the time human's understanding of himself grows and he gets to know his *self* better and better. Plodding towards what is called *epistemology*. Sometimes this understanding favors him and sometimes confuses him. However, he is always amazed by his own complexity. The inherent complexity of conceptual processes of human brain not only has never hindered researchers from making speculations about what goes on inside this black box, but it also has amazingly intrigued them to seek ways to penetrate it. Once we were after intelligent people, since we used to think abstract intelligence (good memory and problem solving) was enough. But due to frequent underachievement and social-psychological problems most students have been suffering, researchers came to believe that intelligent mind is not enough for a good life. They suggest emotional mind (Nelson and Low, 2005) and strategic mind (Leath, 2007) are as much, and at times more important.

In the following sections of this paper, researchers make a brief review of the related literature on the nature of learning, definition of Learning Strategies (LS), Emotional Intelligence (EI) and its components, and finally focuses on the study.

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### 1.1. Learning

Learning is defined as “a relatively permanent change in behavior, including both observable activity and internal processes such as thinking, attitudes and emotions.” Burns (1995, p. 99) Students learn through various ways such as thinking, reading, observing, listening, talking, memorizing, writing, note taking, and doing things in both structured and informal situations. However, *descriptions* of how students learn, according to Brown (2004), neither explains how students learn, nor do they account for why they learn.

Persistent efforts of researchers in the realm of psychology have resulted in different learning perspectives each of which shed some light on the mysterious process of learning. Working on animals' behaviors, Behavioral psychologists, like Pavlov, Thorndike, Watson, and Skinner assumed that conditioning was responsible for learning. Critics say behaviorism views learners as passive beings and ignores the activities of the mind. Cognitive perspective to learning, started with Gestalt Theory by psychologists like Wertheimer, Kohler, and Koffka and advocated by Ausubel, Bruner, and Piage, stress on mental processes such as perception, decision making, attention, memory, and problem solving. Knowledge is grouped into elements according to the principles of proximity, similarity/differentiation, closure and simplicity. Learners are active and construct the Knowledge. The basic premise of Humanistic perspective, developed by Carl Rogers, Maslow and others, is that learning will occur by a facilitator. Moreover, emotions and affect play a great role in learning. Social Learning perspective (constructivism) views learning as a group process and search for meaning. Emphasis is placed on the application of knowledge and Social aspects (interactions).

Each of the aforementioned theories once had its heyday and one cannot say which is really superior to the others. But certainly, they all have contributed to our understanding of learning process.

### 1.2. Learning Strategies

Oxford defines Learning Strategies as "operations employed by the learner to aid the acquisition, storage, retrieval, and use of information. Specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferrable to new situations" (Oxford, 1990, p. 8). And they are objective-oriented procedures.

Marton et.al (1993, mentioned in Brown, 2004) found students are different in approaching learning. They might have surface, deep or strategic approach towards learning. Surface approach leads to reproductive learning which is usually concerned with memorization and reproduction of the content. Deep approach directs them to understanding the material, interaction with the content, reflection, and integration of ideas. Best of all, is strategic approach which is getting more and more popular these days. Students who learn strategically adopt the deep or surface learning strategy according to their perceptions of the task. They manage their time and working space efficiently and select appropriate tasks that they think will enable them to reach at a better result.

O'Malley and Chamot (1990) classified Learning Strategies (LS) into four categories: (1) Cognitive Strategies, (2) Metacognitive Strategies, (3) Social Strategies, and (4) Affective Strategies. Weinstein (1996) and Zimmerman (1990) assert that strategic learners are metacognitive, goal-oriented and self-regulated. Weinstein maintains strategic learners have skill, will and self-regulation strategies necessary to be efficient in meeting their goals. She adds strategic learners recognize themselves as learners, understand the different learning tasks, know the strategies and methods for acquiring, integrating, thinking about and using new knowledge, links new information to his prior knowledge to interpret the new information, know about the current and future contexts and uses of the new information.

This paper adopts Weinstein and Palmer's definition of learning strategies and their classifications. According to Weinstein and Palmer (2002) there are three main components for strategic learning: **Skill**, **Will** and **Self-regulation**. These main components are tested based on following ten scales, each of which, in turn, have eight items.

1. SKILL Component: Information Processing, Selecting Main Ideas, and Test Strategies.
2. WILL Component: Anxiety, Attitude, and Motivation.
3. SELF-REGULATION Component: Concentration, Self-Testing, Study Aids, and Time Management.

Studies show most students suffer from frustration and underachievement due to lack of learning and studying

strategies and explicit instruction on these strategies will improve their performance to a great deal (Murray, 1998 and Durak, et al. 2006).

### 1.3. Emotional Intelligence

Emotional Intelligence(EI) refers to the capacities to recognize and regulate emotions in ourselves and in others. EI can be as much powerful, and at times, more powerful than Cognitive(abstract) Intelligence (IQ) in predicting success in various life challenges (Goleman, 1995). Goleman states IQ can sort people before they start a career; it determines which fields or professions they can hold. To learn which individuals rise to the top or which individuals fail, however, IQ 'short circuit' and EI proves to be stronger predictor of success (Goleman, 1998 & 2001).

Mayer and Salovey define Emotional Intelligence as “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions” (1990, pp. 189). Goleman defines emotional intelligence as abilities “which include self-control, zeal and persistence, and the ability to motivate oneself” (1995, 28). His EI model includes: 1. Knowing one’s emotions, 2. Managing emotions, 3. Motivating oneself, 4. Recognizing emotions in others, 5. Handling relationships.

Bar-On (2000) defines EI as a collection of emotional and social knowledge and skills. According to him, EI is an array of non-cognitive skills which increases one’s success in life. His EI model, which is this paper’s concern, includes five main domains or scales and fifteen sub-domains or sub-scales:

1. Intrapersonal skills (self-regard, emotional self-awareness, assertiveness, independence, and self-actualization)
2. Interpersonal skills (empathy, social responsibility, and interpersonal relationships)
3. Adaptability (reality testing, flexibility, and problem solving)
4. Stress management (stress tolerance and impulse control)
5. General mood (optimism and happiness)

Studies on EI indicate people who have higher EI are apt to be more socially competent. They have better relationships, and are more interpersonally sensitive than lower in EI (Bracket et al., 2006; Lopez et al., 2004). Moreover, theoretical and empirical studies by Aghasafari, 2006; Fahim & Pishghadam, 2007; Stottlemayer, 2002 support the positive relationship between EI and academic success.

## 2. Study

Regarding the importance learning bears throughout peoples’ lives, and understanding that learning as a complex process is the result of interactions of so many factors like cognition, emotions and strategies, the present study aims to investigate the relationship between Emotional Intelligence and Learning Strategies at the academic level. The researchers hope the study will contribute to highlight the necessity of incorporation of strategic learning and emotional literacy in the curriculums, either explicit or integrated learning strategies instruction, depending on the situation and needs. The study addresses the following hypotheses:

1. There is no relationship between girl and boy students’ total EI and their LS.
2. Emotional Intelligence is not different in students of different fields.
3. Emotional Intelligence is not different in boy and girl students.
4. Learning Strategies are not different in the students of different fields.
5. Learning Strategies are not different in the girl and boy students.

### 2.1. Method

100 university students from northern Iran aged between 20 and 30 years old were randomly selected for the purpose of the study. They were 50 females and 50 males studying in different fields of study: Humanities(17), Basic science(21), Engineering(33), and Medical Science(29). In order to investigate the relationship between Emotional Intelligence and Learning strategies, two standard questionnaires were administered: Bar-On test and The

Learning and Study Strategies Inventory (LASSI). Bar-On test is a self-report questionnaire which originally includes 133 items, but it was reduced to 90 items and customized for Iranian context by Dr. Samuee and et al. in 2001. The Learning and Study Strategies Inventory (LASSI) is a self-report instrument, too. It is an 80- item test designed by Weinstein and Palmer (2002) to assess learning strategies. The questionnaire was translated and customized for Iranian context by Dr. Khadivzadeh and et al. in 2003. Both tests employ a five point response scale ranging from ‘I completely agree’ to ‘I completely disagree’ for Bar-On test and ‘not at all like me’ to ‘very much like me’ for LASSI. Due to the length of the questionnaires, participants were asked to complete Bar-On and LASSI questionnaires at separate sessions: each took around half an hour. To determine the relationship between students’ EQ and their Learning Strategies, descriptive and inferential statistics such as Pearson correlations, t-test and ANOVA were applied to the collected data.

## 2.2. Result

### 1. There is no relationship between girl and boy students’ total EI and their LS.

Table 1: Girls’ EI and LS

sig	
Learning Strategies	
Total EI	0.000
Number of the girls	50

P<0.05

Table 2: Boys’ EI and LS

sig	
Learning Strategies	
Total EI	0.014
Number of the boys	50

P<0.05

Table 1 and 2 indicate there is a significant relationship between girls and boys’ total emotional Intelligence and their Learning Strategies at the probability level of 0.05. The correlation between the two variables is positively significant.

### 2. Emotional Intelligence is not different in students of different fields.

Table 3: EI and fields of study

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	2321.872	3	773.957	1.144	0.355
Within Groups	64957.568	96			
Total	67279.440	99			

P<0.05

To investigate Emotional Intelligence in different fields of study, ANOVA was run. The results, displayed in table 3, reveal Emotional Intelligence is not different across the fields under study.

### 3. Emotional Intelligence is not different in boy and girl students.

Table 4: EI and GENDER

	Number	Ave	SD	t	Sig
Girl	50	307.6200	29.7444	4.363	0.000
Boy	50	286.700	16.2797		

According to Table 4 and the probability level, girls and boys under study have significantly different Emotional Intelligences.

4. *Learning Strategies are not different in the students of different fields.*

Table 5: LS across fields

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	3788.793	3	1262.931	1.797	0.153
Within Groups	67485.957	96	702.979		
TOTAL	71274.750	96			

To investigate Learning Strategies in different fields of study, ANOVA was conducted. Table 5 indicates that learning strategies are not significantly different among different fields of study.

5. *Learning Strategies are not different in the girl and boy students.*

Table 6: LS in girls and boys

	Number	Ave	SD	t	Sig
Girls	50	271.0400	29.4555	5.913	0.005
Boy	50	243.6600	14.2994		

Pearson correlation was applied to study Learning Strategies in different genders. The results shows girls and boys are significantly different in using Learning Strategies.

### 3. Discussion and Conclusion

The present study intended to probe the relationship between Emotional Intelligence and Learning Strategies. The findings indicate there is a significant relationship between students' total emotional intelligence and learning strategies both in females and males. This corresponds with Aghasafari (2006) who found considerable relationship between Emotional Intelligence and language learning strategies. According to Lawson (2011), "emotions are the relay stations between sensory input and thinking. When the input is interpreted positively, we are motivated to act and achieve a goal. When the input is interpreted negatively, we do not act and do not learn. Negative emotions (Anxiety, depression and anger or frustration) can interfere with learning and can result from problems with learning, creating a maladaptive and self-defeating pattern of behavior, which prevents learning and stunts mental/emotional growth." The results also show there isn't a meaningful difference between students' Learning Strategies and their fields of study. This is consistent with the study by Khadivzadeh, et al. (2003) which indicates that the use of learning strategies are not significantly different across different fields of study and levels. Moreover, the study confirms there is a meaningful difference between males and females in learning strategies. This also corresponds with Kovach (1999)'s findings. He found that girls and boys are significantly different in four areas of learning strategies: motivation, test strategies, study aids, and anxiety.

It is always said that the mission of educational systems and organizations is to prepare competent and autonomous people for life. One way to produce competent, effective citizens is to help our students to learn to learn: to empower them to plan, monitor and reflect. Assist them to know more about their feelings and their learning, guide them to develop goals, and cooperate with others. Watkins et al. (2000) presented a very good source on 'meta-learning' which is really useful in growing self-contained learners. A popular saying frequently referred to in the literature goes "Give a man a fish and you have fed him for today; teach a man to fish, and you have fed him for a lifetime." To reach this great goal, a normal cognitively intelligent person should be emotionally and strategically intelligent, too.

According to Nelsons and Low, "If students are to develop essential life skills and the ability to think constructively and act wisely, the emotional mind must be understood and considered central to education for the

21st century" (2006, p. 1). Emotionally intelligent behavior is reflected in the ability to think constructively and behave wisely. Wise and effective behavior requires the ability to regulate and express emotions in healthy ways. EI skills synchronize the cognitive and emotional minds and are essential to effective behavior. EI skills help students to deal with stressful and conflict situations. Emotionally healthy students are happier, more cooperative and learn more effectively (Nelsons and Low, 2005). Consequently, researchers suggest educational institutions take their responsibility more serious. They recommend administration of Emotional Intelligence and Learning Strategy tests as screening or diagnostic measures. They might be able to administer EI and SL tests after the entries prove to be cognitively competent for their chosen field of study. It is not an easy task, but in the long run, it brings benefits to the whole society.

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