



A study of effects of emotional intelligence on the academic performance of the students of Utas Nizwa

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Abstract

Emotional Intelligence is a growing concept among academic researchers. Studies show a positive influence of EI on individuals; however, it is not much explored in a higher educational context. In the present study, we tested the influence of EI on students' academic performance in the context of a higher educational institute in Oman. The study utilized a quantitative approach and a cross-sectional survey is used for data collection (n=111). The findings show that there is a positive and significant correlation between aspects of emotional intelligence and academic performance measured by CGPA including self-awareness ($\beta=.478, P<0.05$); emotions management ($\beta=.429, P<0.05$); self-motivation ($\beta=.290, P<0.05$); empathy ($\beta=.386, P<0.05$); and social skills ($\beta=.249, P<0.05$). The result implies that EI is strongly associated with academic performance. The implication of the study is that it academic institutions need to give a greater attention to the emotional development of the students.

Introduction: Emotional Intelligence is a growing concept among academic researchers. Studies show a positive influence of EI on individuals; however, it is not much explored in a higher educational context.

Problem: In the present study, we tested the influence of EI on students' academic performance in the context of a higher educational institute in Oman.

Methodology: The study utilized a quantitative approach and a cross-sectional survey is used for data collection (n=111).

Results: The findings show that there is a positive and significant correlation between aspects of emotional intelligence and academic performance measured by CGPA including self-awareness ($\beta=.478, P<0.05$); emotions management ($\beta=.429, P<0.05$); self-motivation ($\beta=.290, P<0.05$); empathy ($\beta=.386, P<0.05$); and social skills ($\beta=.249, P<0.05$).

Implications: The result implies that EI is strongly associated with academic performance. The implication of the study is that it academic institutions need to give a greater attention to the emotional development of the students.

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Introduction

Emotional intelligence (EI) is a type of social intelligence that involves the ability to monitor one's own and other's emotions, to discriminate among them, and to use this information to guide one's thinking and actions (Salovey & Mayer, 1990) ^[29]. EI is an important area of psychology and has been found as a key factor in the academic lives of students. Researchers and academicians have examined the association of EI with many characteristics among the student population such as stress management (Low

& Nelson, 2006; Montes-Berges & Augusto, 2007) ^[20, 23], problem-solving abilities (Alumran & Punamaki, 2008) ^[11], etc. EI abilities are highly important as they were four times more important than IQ in determining professional success and prestige, even for these scientists (Goleman, 1998) ^[11]. Research shows that EI has been positively linked to academic performance and emotional well-being of individuals (Cecchini, Méndez-Giménez, García-Romero, Validación del, & Cuestionario de, 2018) ^[18]; social relationships (Song, Huang, Peng, Law, Wong, & Chen, 2010); Self-awareness (Virginia, Nancy, Dodd, & Brown, 2011) ^[3]; self-motivation (Pekrun, Lichtenfeld, Marsh, Murayama, & Goetz, 2017) ^[28]; and empathy (Kokkinos & Kipritsi 2012) ^[18]. Based on the empirical evidence of studies in various contexts, it can be seen that EI is a highly important concept. In the Education context, there is little evidence for its relation to academic performance and this is the focus of the present study.

Statement of the problem

There has been substantial evidence proving that being emotionally intelligent can help individuals excel through life transitions starting from school to college, and later into the working world. Some relevant studies have shown a positive relationship between student's emotional intelligence and higher academic achievement, citing reasons such as emotionally intelligent students have better interpersonal and intrapersonal skills, are more adaptable, and are better at managing stress. Therefore, this study aims to find out the level of emotional intelligence among the students of the UTAS, Nizwa, and to investigate its influence on their academic achievement. Since the respondents are students, it would be insightful to find out how emotionally intelligent they are and to establish whether emotional intelligence enables them to perform well academically.

Significance of study

The results of this research will enable us to establish a relationship between the various aspects of EI among students and their academic achievements. Colleges and universities will be able to develop better course outcomes for the students if they know which factors are associated with the development of EI among students. Even teachers could focus on certain EI traits to bring out the best in their students. A lot of literature has been found establishing a relation between various aspects of EI and the academic achievements of students studying in various disciplines. However, the five factors of EI focused in this study are a combination not found in any single piece of literature till now. Also, the results of this research can form a base for further research on students, particularly in various universities of Oman, especially UTAS which will enable the academic decision-makers to come up with better courses and assessment methods that focus on the all-round development of the students.

Objectives

1. To measure the effects of self-awareness on students' academic performance.
2. To measure the relationship between their emotion management skills and academic performance.
3. To measure the relationship between their self-motivation and academic performance.
4. To measure the relationship between their empathy and

academic performance.

5. To measure the relationship between their social skills and academic performance.

Literature Review and Hypotheses Development Emotional Intelligence (EI), EI Models, and EI Dimensions

EI refers to an individual's strength to perceive, understand, direct, and react to feelings, promote relationships, and influence behavior (Kumar, Chowdhury, Panwar, & Kosala, 2016; Patel, 2017) ^[19, 27]. After the emergence of EI, its models and theories started to emerge. The research literature on EI categorized those models into ability and trait/mixed models. The EI ability models concentrate on mental abilities which enable people to use emotions-laden information with the aim of cognitive processing. These models conceptualize EI as a set of mental abilities for solving emotion-related problems. However, mixed EI models are the combination of mental abilities and personality traits like enthusiasm, optimism, self-confidence, etc. (Daus & Ashkanasy, 2003; Fernandez-Berrocal & Ruiz, 2008) ^[5, 8].

All these EI models, however, share a common core of basic concepts. EI refers to the ability to recognize and regulate emotions in ourselves and in others. This definition suggests four major EI domains: Self-Awareness, Self-Management, Social Awareness, and Relationship Management. (Goleman, 2001) ^[12]. The domains of self-awareness and self-management, for example, fall within what Gardner (2012) ^[9] calls intrapersonal intelligence, and social awareness and relationship management fit within his definition of interpersonal intelligence.

Arguing from their framework of EI as a theory of intelligence, Mayer, Caruso, and Salovey (2000) ^[22] make a distinction between EI models that are mixed and those that are pure models, or ability models, focusing exclusively on cognitive aptitudes. Mixed models, contain a melange of abilities, behaviors, and general dispositions and conflate personality attributes such as optimism and persistence with mental ability. Whereas a pure model is competency-based, comprising a discrete set of abilities that integrate affective and cognitive skills but are distinct from abilities measured by traditional IQ tests (Goleman, 2001) ^[12]. In this paper, will use the mixed model proposed by Goleman to determine the EI of the students of UTAS, Nizwa. The mixed model consists of 5 dimensions of EI and details are as follows.

Emotional Intelligence and Academic Performance

EI plays an important role in a student's academic life. A student with a high EI can be more self-confident in dealing with the challenges of living and learning in educational institutions; a high level of EI can aid in the learning process, and as a result, can improve the academic performance of students. Parker, Summerfeldt, Hogan, and Majeski (2004) ^[26] indicated that EI was a unique predictor of students' academic performance and played an important role in their transition from high school to university. Nasir and Masrur (2010) ^[24] explored the relationship of EI with academic achievement among university students and found a significant correlation between them and Yahaya, Saree, Bachok, Yahaya, Boon, Hashim, & Lee, (2012) ^[34] also found positive relationships between EI and academic achievement among students. Based on the previous studies and emotional intelligence theory, we propose the relationship between emotional intelligence and students' academic performance

and aim to test in a particular context. The following discussion is about individual dimensions of EI and its relationship with academic performance for hypotheses development purpose.

Self-Awareness and Academic Performance

The concept of 'self' is central to the educational system. Fenigstein, Scheier, & Buss (1975) ^[7] emphasized that education should not attempt to change students' personality traits, but rather impart to students an insight into their emotional responses to specific situations. Such insight is referred to as self-awareness. Self-awareness may be public or private; it is a temporary state that may be susceptible to teaching interventions and may fluctuate within individuals over time and across situations (Govern & Marsch, 2001) ^[1]. Goleman (2001) ^[12] suggests that we would be better off if we are aware of our own emotions. By doing so we could control our impulses, and cope with stress or anger. Self-awareness is not only of concern to the individual but also has a significant impact on their performance and contributes to the organizational performance (Houghton & Neck, 2002; Yahaya *et al.*, 2012; Nasir & Masrur, 2010) ^[2, 34, 24]. Based on the discussion, we propose the following hypothesis.

H1: There is a significant effect of self-awareness on students' academic performance

Emotion Management and Academic Performance

The scope of EI includes the verbal and nonverbal appraisal and expression of emotion, the regulation of emotion in the self and others, and the utilization of emotional content in problem-solving. (Salovey & Mayer, 1990) ^[29] EI acts as a background for understanding the association between cognition and emotions (Suleman, Hussain, Syed, Parveen, Lodhi, & Mahmood, 2019) ^[31]. EI is the ability to perceive emotions, integrate emotions to assist thought, understand emotions and emotional knowledge, and reflectively regulate and manage emotions so as to promote emotional and intellectual growth. (Beauvais, Özbaş, & Wheeler, 2019; Yahaya *et al.*, 2012; Nasir & Masrur, 2010) ^[34, 2, 24]. Based on the discussion, we propose the following hypotheses:

H2: There is a significant effect of emotion management on students' academic performance

Self-Motivation and Academic Performance

Types of self-motivation include intrinsic motivation (participation in an activity for the inherent satisfaction and enjoyment), integrated regulation (participation is related to the "inner self") and identified regulation means behavior motivated by internal goals (José, Aguilar-Parra, Adolfo Cangas, Rosario Bermejo, Carmen Ferrandiz, and Remedios López-Liria, 2019) ^[32]. Adequate levels of anxiety have been significantly linked to the motivation of students (Piipari, Watt, Jaakkola, Liukkonen, & Nurmi, 2009) ^[35]. A notable influence of self-motivation has been observed on the psychological well-being of the students (Hancox, Ntoumanis, & Thøgersen-Ntoumani, 2015; Yahaya *et al.*, 2012; Nasir & Masrur, 2010) ^[34, 24]. Based on these previous studies, we propose the following hypotheses:

H3: There is a significant effect of self-motivation on students' academic performance

Empathy and Academic Performance

Ozcan, Bilgin, and, Eracar (2011) ^[25] demonstrated that

psychodrama improved empathy in nursing students. Individuals with high EI were perceived as more pleasant and empathic than others. (Mayer, Roberts, & Barsade, 2008). EI is positively related to empathy, the establishment of personal relationships, and satisfaction with one's social network (Ciarrochi, Chan, & Caputi, 2000) ^[4]. With regard to empathy, adolescent girls appear to possess more of the cognitive and emotional components of empathy than boys. (Escrivá, Navarro, & García, 2004; Pérez-Albéniz, de Paúl, Etxeberría, Montes, & Torres, 2003; Yahaya *et al.*, 2012; Nasir & Masrur, 2010) ^[6, 34, 24]. Based on the previous studies, we propose the following hypotheses:

H4: There is a significant effect of empathy on students' academic performance

Social skills and Academic Performance

According to Hossein and Kheir (2002) ^[16], one of the important aspects of human growth is the socialization process. Social development ensures a safe and healthy relationship with individuals. Along with the growth in other academic skills, considering the social aspects of life and gaining the necessary requirements for a healthy relationship with others is one of the challenges facing adolescents. Socialization is a process in which the individual's norms, skills, motivations, attitudes, and behaviors are formed so that the individual recognizes his/her current or future role in the desired society. Zamani, Kheradmand, Cheshmi, Abedi, & Hedayati, (2010) ^[36] argue that the acquisition and deployment of social skills and ways of communicating and interacting with others are the main components of social development, particularly among adolescents. People with high emotional intelligence can develop more successful social relationships that promote belongingness and well-being (Ukaegbu, 2015) ^[33]. EI correlates positively with indices of good social relations and social competencies (Yahaya *et al.*, 2012; Nasir & Masrur, 2010; Mayer *et al.* 2008) ^[34, 24]. Based on the discussion, we propose the following hypothesis.

H5: There is a significant effect of social skills on students' academic performance.

Research Methodology

Participants

A total of 111 students from the CEBA College of Economics and Business Administration participated in the study (38 boys and 73 girls). These participants were between the ages of 18 and 22 and belonged to various governorates of Oman.

Instrument

Emotional Intelligence: The instrument utilized was the Spanish version of the Emotional Intelligence Scale by Daniel Goleman taken from his book 'emotional intelligence' (1995) ^[10]. This questionnaire features 25 items distributed among five factors that measure the capacity to recognize one's own emotions. The responses to the different items were based on a Likert scale from 1 (totally disagree) to 5 (totally agree).

Data Analysis

The present study carried out descriptive statistical analyses, correlations, and regression analyses using the statistics program SPSS v25 (IBM, Armonk, NY, USA).

Results

Table 1: Demographic Characteristics

		Frequency	Percent
Gender	Male	38	34.2%
	Female	73	65.8%
Qualification	DIP 1	36	32.4%
	DIP 2	38	34.2%
	ADV DIP	19	17.1%
	B TEC	18	16.2%

Source: Survey Result

The above table 1 shows the gender of respondents, out of 111 respondents. 38 (34.2%) are males and 73 (65.8%) are Females. It also shows the education level of respondents, out

of 111 respondents, 36 are from diploma 1, 38 from diploma 2, 19 from advanced diploma, and 18 from B. Tech.

Table 2: Descriptive Statistics

Variable	Cronbach Alpha	Minimum	Maximum	Mean	Std. Deviation
Self-Awareness	.678	2.00	5.00	3.8090	.68934
Emotion Management	.782	1.80	5.00	3.5640	.71868
Self-Motivation	.734	1.40	5.00	3.8216	.69719
Empathy	.697	1.80	5.00	3.5351	.73468
Social Skills	.755	1.60	5.00	3.7189	.77148
CGPA	n/a	1.60	4.00	3.5601	.51545

Source: Survey Result

The result as given in table 2 shows that as per the respondents, there is a moderate to high level for all aspects of emotional intelligence including self-awareness (M=3.80, SD=.68); emotions management (M=3.56, SD=.71); self-

motivation (M=3.82, SD=.69); empathy (M=3.53, SD=.73); and social skills (M=3.71, SD=.77). Similarly, the CGPA reported is also close to high (M=3.56, SD=.51).

Table 3: Pearson Correlations

	1	2	3	4	5	6
Self-Awareness	1	.505**	.488**	.512**	.414**	.478**
Emotion Management		1	.505**	.954**	.555**	.429**
Self-Motivation			1	.481**	.607**	.290**
Empathy				1	.570**	.386**
Social skills					1	.249**
CGPA						1

The correlation result as given in table 3 shows that there is a positive and significant correlation between aspects of emotional intelligence and academic performance measured by CGPA including self-awareness (r=.478, P<0.05); emotions management (r=.429, P<0.05); self-motivation

(r=.290, P<0.05); empathy (r=.386, P<0.05); and social skills (r=.249, P<0.05). The result shows that emotional intelligence is strongly associated with academic performance.

Table 4: Regression Results

Model	Unstandardized Coefficients		Standardized Coefficients	t-stat	Sig.	Remarks
	B	Std. Error	Beta			
(Constant)	1.941	.284		6.836	.000	
Self-Awareness	.279	.076	.373	3.685	.000	H1 Supported
Emotion Management	.442	.200	.617	2.206	.030	H2 Supported
Empathy	-.261	.198	-.372	-1.321	.189	H3 Not Supported
Social skills	-.022	.076	-.033	-.296	.768	H4 Not Supported
Self-motivation	-.003	.083	-.004	-.040	.968	H5 Not Supported
R=.538						
Rsquare=.289						
Adjusted Rsquare=.256						
Fstat=8.55 (0.000)						

The regression results given in table 4. In these results, RSquare result indicates that the dimensions of emotional intelligence explain a 28.9% variation in the dependent variable of academic performance measured by student CGPA. The F-statistics shows that the model is fit and

significant (Fstat=8.55, P<.05). The individual beta coefficient indicates that self-awareness (β=.279, P<.05) and emotions management (β=.442, P<.05) exert a positive and significant effect on students' academic performance. Whereas, the results for the remaining three aspects including

empathy ($\beta = -.261, P > .05$); social skills ($\beta = -.022, P > .05$); and self-motivation ($\beta = -.003, P > .05$) turned out to be insignificant. The result shows that self-awareness and emotional management are the most important contributors to students' academic performance in this context. Based on the results, we accept H1 and H2 while rejecting H3, H4, and H5.

Discussion

The focus of the study was to test the influence of EI on students' academic performance. The study reported that two out of the total five dimensions exert a positive significant influence on academic performance while other dimensions turned out to be insignificant. The result shows that EI is important and contributes positively to the individual academic performance. The results are consistent with the findings of previous studies including Nasir and Masrur (2010) [24], and Yahaya *et al.* (2012) [34]. More specifically, we found that self-awareness and emotional intelligence positively predict students' academic performance. The concept of self-awareness and emotional intelligence are also reported to have positive effects on individual in other relevant studies including Houghton & Neck (2002) [17]; Yahaya *et al.* (2012) [34]; Nasir & Masrur, (2010) [24]. As far as the insignificant results for the remaining three dimensions are concerned, these are inconsistent with the literature (e.g. Houghton & Neck, 2002) [17]. The reasons can be insufficient data or little relevance in the particular context from which the data is collected. Overall, we can argue that EI is an important concept and its importance cannot be ignored in the higher educational context.

Conclusion

High EI can boost the happiness, leadership skills, and even professional life of students. Students with high EI can develop a variety of social skills due to positive social rewards and feedback from their teachers that they can push them positively toward their academic achievements. Social connections within and outside the campus are required to satisfy their needs, improve their abilities, and enhance their personal values. An improvement in the EI of the students is possible by administering a questionnaire to all students to measure their EI to be able to manage them accordingly. Also having a good one-to-one coaching program, a specific feedback system, and cognitive behavior therapy could be useful to boost the student's EI and thereby their academic performance and overall personality development. Various classroom strategies can be designed focusing on developing the EI of the students *viz*; discussions, creative drama, etc. Universities must invest enough in training their teachers in emotional skills so they are well-equipped to pass them on to their students.

Limitations

Limitations of the study include a small sample size and a single higher educational institution. Additional research on other factors of emotional intelligence and their interconnections and correlations with various aspects of student's lives can be studied. The difference in emotional intelligence between both genders can be studied further.

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