

THE CORRELATION BETWEEN IRAQI EFL COLLEGE STUDENTS' ENGAGEMENT AND THEIR ACADEMIC ACHIEVEMENT

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ABSTRACT

Teachers must provide opportunities for students to be actively engaged with the subject matter. To do so, teachers must use certain strategies to capture students' engagement at various levels like cognitive, affective, and behavioral engagement from beginning to end of the lesson.

The present study aims to determine the correlation between students' engagement (cognitive, affective, and behavioral engagement) and their academic achievement along with gender variable if any. The researcher used college students' engagement checklist to measure their engagement. To achieve the aims, a sample of forty students from the second stage, Department of English, College of Imam Al-Kadhim is included in the study. Pearson correlation formula has been used to identify the seven aims of the study. The results indicate that there is statistically positive correlation at $\alpha \leq 0.05$ level of significance between students' cognitive, affective, and behavioral dimensions and their academic achievement. In the light of the results obtained some valuable recommendations concerning the students are put forward.

1. INTRODUCTION

1.1 The problem and its Significance

Student engagement can be defined as students' involvement in activities and conditions that are linked with high learning qualities. While students are considered to be responsible for building their own knowledge and experiences, learning is said to depend on institutions and conditions that enhance students involvement. (Bryson, 2014:3)

Engagement is now considered to be critical to students' success in college whether success is defined as academic performance, persistence to degree completion, or satisfaction (Quaye and Harper, 2015: 237).

The term "student engagement" includes academic engagement that can occur both in and out of class and has a positive effect on students' performance. (Parikh, M. 2008:31)

According to Bryson (2014: xvi) student engagement is closely related to what students do in their studies. Indeed, students' success depends on their willingness to engage with demands of their study.

Most definitions of student engagement include a psychological and behavioral component. Student engagement is used to depict student willingness to participate in routine school activities, such as attending classes, submitting required work

and following teachers' instructions in class (Chapman, 2003).

Researchers have recently used the term engagement to refer to the extent to which students identify with and value schooling outcomes, and participate in academic and non-academic school activities. (Bryson 2014:8)

Many studies about student engagement look upon it as a predictor of academic achievement, inferring that being disengaged, or detached from school, causes poor academic achievement. Hence, they are directly proportional to each other; greater the engagement, greater the achievement. However, the theoretical literature argues that it is low achievement that causes students to withdraw from school, or that engagement and academic achievement go hand-in-hand. Bloom (1976) noted:

"At the other extreme are the bottom third of students who have been given consistent evidence of their inadequacy...over a period of five to ten years. Such students rarely secure any positive reinforcement in the classroom... from teachers or parents. We would expect such students to be infected with emotional difficulties [and to] exhibit symptoms of acute distress and alienation from the world of school and adults."(p.8)

The multi-dimensional definition of engagement focuses on the cognitive, behavioral and affective indicators of student engagement (Skinner and Belmont, 1993).

Cognitive engagement is said to prevail when students expend mental effort necessary to comprehend complex ideas and difficult skills. Flexibility in problem solving, willingness for hard work, mental effort and desire to master a task are examples for cognitive engagement. (Fredericks et al., 2004:59)

Behavioral engagement, the second dimension of engagement, refers to the active participation of students in academic, social and extracurricular activities. For example, positive behavior indicates the existence of positive qualities that foster learning like effort, persistence, concentration, attention, asking questions, contributing to class discussion, following

rules, studying, completing homework and participating in school-related activities. (ibid)

Cognition is an intellectual process by which one acquires, stores, retrieves, transforms, and uses knowledge. An advanced level of cognition is metacognition. Metacognition occurs when learners are aware of their own cognitive processes and know when, where, and how to use these processes to facilitate and support their learning. (Riggs and Gholar, 2009:8). It is an awareness about how learning takes place.

Another kind of engagement is affective engagement which means translation of what is learnt into practice, implementation of knowledge, application of knowledge to real life situations. Students who are affectively engaged hold positive attitudes towards academic activities (ibid). For example, affective reactions in the classroom, attitudes towards classes and teachers, sense of belongingness and appreciation of success in schools or colleges. All three categories represent essential dimensions of engagement. (Skinner and Belmont, 1993:571)

The affective domain deals with one's feelings, emotions, attitudes, self-perception, self - concepts, values, self -esteem, and self-efficacy. Research indicates that the affective domain significantly influences one's ability to learn or perform. (Riggs and Gholar, 2009:9)

Student engagement in classroom activities also fosters greater gains in students' academic, emotional, social and behavioral achievement (Klem and Connell, 2004: 262).

High engagement while doing activities in a classroom is proved to be an important predictor that ensures motivation. Students remain committed and display overall good performance. (Shernoff and Hoogstra, 2001).

According to Astin(1993), students engagement is directly related to personal development of students and learning. Students who are engaged in learning invariably develop a positive attitude towards what they learn. This ensures enjoyment on the part of students and appreciation of the content that they learn.

When students are engaged in learning, they participate actively in the process rather than being passive learners. They get an opportunity to create knowledge. Other important skills like communication and cooperation are incidentally acquired. These skills enhance the capacity of students for continuous learning and personal development. Students are able to build self-confidence, earn good grades and score better on standardized tests. They are better able to adjust with the school environment (Skinner and Belmont, 1993:573).

Learner engagement implies a number of other positive and desirable effects like improved performance, regular attendance, and consequently, improved grades in examinations. Student engagement is increasingly seen as an indicator of successful classroom instruction. Engagement in learning is linked to reduced anxiety rates of students (Kushman et al., 2000: 471).

In higher education, understanding student engagement necessitates clarity about students' experiences, their knowledge, background, a brief picture of the nature of higher education, group work, assessment and the anxiety associated with it and so on (Colin, 2014: xvi).

Group activities provide plenty of scope for active engagement of students. Within group activities, students look for outcomes that are beneficial to them on an individual basis and at the same time, to all other group members (Smith et al., 1981:221).

Experiments allow hands on experience, practical application of knowledge, interaction with other students, scope for exploring and manipulating objects, struggling with questions, controversies etc. (Dodge, 2005).

1.2 Objectives

The main objectives of this study are exploring:

1. Students' cognitive and affective domains.
2. The significant differences in students' cognitive dimension according to their gender.
3. The significant differences in students' affective dimension according to their gender.
4. Behavioral domain.

5. The significant differences in students' behavioral dimension according to their gender.
6. The correlation between students' cognitive, affective, and behavioral domains and their academic achievement.

1.3 Scope

The scope of this study is limited to:

1. Measuring students' cognitive, affective, and behavioral dimensions.
2. Measuring the significant differences of the students according to their gender.
3. Measuring students' academic achievement, and
4. Iraqi EFL first and second stage students of English department, Imam Al-Kadhim University College.

1.5 Procedure

To achieve the aims of the present study, the following procedures will be adopted by the researcher to collect data:

1. Reviewing literature concerning the topics under investigation.
2. Selecting a representative sample consisting of forty students from the first and second stage in English department /Imam Al-Kadhim College.
3. Constructing the instrument, preparing a questionnaire with the guidance of experts, examining the validity of the items and making changes, additions and modifications if necessary.

2. METHODOLOGY

2.1 Population

The population of this study comprises the students of English departments in Iraqi college. The choice is intentional (in the selection of the Imam Al-Kadhim University College) and random (in selecting a representative number of students).

2.2 Sample

Forty students were chosen randomly from the first and second stage, English department, Imam Al-Kadhim University College to represent the sample of the study.

2.3 The Instruments of the Study

In order to fulfill the aims of the present study, which are determining the correlation between

students' engagement and their academic achievement, a checklist was constructed by the researcher, as shown in the appendix.

The items of the tools have been collected on the basis of the related literature, previous studies which deal with students' engagement, their academic achievement, and experts' opinions.

2.4 Face Validity

Face validity is the best type of validity in the case of self-rating (Nunnally, 1972:353). It is secured if the list of items appears to be measuring what is intended to be measured (Ebel, 1972:78).

After constructing the research instrument, it was submitted to the jury to assess their validity. Jury members* were selected on the basis of their specialization and experience in the field of education, psychology, and EFLT. Each member of the jury was requested to point out his/her remarks and suggestions about the suitability of the instruments and items. Accordingly, some items have been modified and others excluded. The majority of jury members have verified the validity of the items in the questionnaire.

*The jury of experts included:

-LiqaHabeeb, Ph.D. University of Diyala, College of Education.

-Fatima Raheem, Ph.D. University of Mesan, College of Education.

-Ghazwan Adnan, Ph.D. University of Diyala, College of Education

Table (1)

The Result of T- Test for the Students' Cognition

Variable	Number	mean	Standard deviation	Hypothetical mean	T- Value		Level of significance
					Calculated	Tabulated	
Students' Cognitive ability	40	57,88	9,34	48	6,67	2	Significant

2.5 Pilot Study

After constructing the research instruments, a pilot study was required to find out exactly whether they are well constructed or not. Twenty students were chosen randomly from English department, Imam Al-Kadhim College for the pilot study. The pilot sample is excluded from the actual total sample of the study.

Results of the pilot study can be a good indicator for making any necessary modifications in the final version of the research tools and to determine the effectiveness of the items in the light of the subjects' responses.

2.6 Final Administration of the Instruments

The final version of the checklist was distributed to the participants at the end of April, 2015. The students were asked to give their views on the items on a 3-point scale. The responses of the students were used by the researcher to arrive at conclusions.

3. RESULTS

3.1. Result Related to the First Aim

In order to achieve the first aim, "Exploring students' cognitive dimension" 'T- Test' formula was applied to analyze students' cognitive ability. Results indicate that there is statistically significant difference at $\alpha \leq 0.05$ level of significance and (39) degree of freedom. The calculated T-value is (6.67), which is higher than the T-tabulated (2.) and as shown in table (1).

3.2. Result Related to the Second Aim

To achieve the second aim, "Exploring the significant differences in students' cognitive dimension according to their gender" 'T- Test' formula was applied to analyze students' cognition. Results indicate that there is no statistically

significant difference in students' cognitive dimension according to their gender at $\alpha \leq 0.05$ level of significance and (39) degree of freedom. The calculated T-value is (1.15), which is lower than the T-tabulated (2.) and as shown in table (2).

Table (2): The Result of T- Test for the Students' Cognition According to their Gender

Variable	Number	sex	mean	Standard deviation	T- Value		Level of significance
					Calculated	Tabulated	
Students' cognition according to their gender	20	male	59.32	72.64	1.15	2	Significant
	20	female	56.26	69.92			

3.3. Result Related to the Third Aim

In order to fulfill the objective mentioned third, "Exploring students' affective dimension" 'T- Test' formula was applied. Results indicate that there are statistically significant differences at $\alpha \leq 0.05$ level of significance and (39) degree of freedom. The calculated T-value is (2.62), which is higher than the T-tabulated (2.) and as shown in table (3).

Table (3): The Result of T- Test for the Students' affection

Variable	Number	mean	Standard deviation	Hypothetical mean	T- Value		Level of significance
					Calculated	Tabulated	
Students' affective behaviour	40	24.93	6.35	22	2.62	2	Significant

3.4. Result Related to the Fourth Aim

To achieve the fourth objective, "Exploring the significant differences in students' affective dimension according to their gender", 'T- Test' formula was applied. Results indicate that there are statistically significant differences at the level at $\alpha \leq 0.05$ level of significance and (39) degree of freedom in favor of the female. The calculated T-value is (1.15), which is lower than the T-tabulated (2.) and as shown in table (4).

Table (4): The Result of T- Test for the Students' Affective Dimension According to their Gender

Variable	Number	sex	Mean	Standard deviation	T- Value		Level of significance
					Calculated	Tabulated	
Students' affective	20	male	22.72	24.77	2.83	2	Significant in favor

dimension according to their gender	20	female	27.33	28.21			of the female
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3.5. Result Related to the Fifth Aim

In order to achieve the fifth objective, "Exploring Students' behavioral dimension." 'T- Test' formula was used. Results indicate that there are statistically significant differences at $\alpha \leq 0.05$ level of significance and (39) degree of freedom. The calculated T-value is (6.67), which is higher than the T-tabulated (2.) and as shown in table (5).

Table (5): The Result of T- Test for the Students' Behavior

Variable	Number	mean	Standard deviation	Hypothetical mean	T- Value		Level of significance
					Calculated	Tabulated	
Students' behavior	40	43.4	8.93	34	6.67	2	Significant

3.6. Result Related to the Sixth Aim

To fulfill the sixth aim, "Exploring the significant differences in the students' behavioral dimension according to their gender", 'T- Test' formula was applied. Results indicate that there are no statistically significant differences at the $\alpha \leq 0.05$ level of significance and (39) degree of freedom according to their gender. The calculated T-value is (0.63), which is lower than the T-tabulated (2.) and as shown in table (6).

Table (6): The Result of T- Test for the Students' Behavioral Dimension According to their Gender

Variable	Number	sex	Mean	Standard deviation	T- Value		Level of significance
					Calculated	Tabulated	
Students' behavioral dimension according to their gender	20	male	44.11	66.15	0.63	2	Not Significant
	20	female	42.53	59.87			

3.7. Result Related to the Seventh Aim

It is found that there is statistically positive correlation at $\alpha \leq 0.05$ level of significance between students' cognitive, affective, and behavioral dimensions and their academic achievement. Thus, in order to determine the degree of relationship between students' engagement and their passing or failing second year college course, Biserial correlation coefficient has been used to identify the seventh aim and as shown in table (7).

Table (7): The correlation between Students' Cognitive, Affective, and Behavioral Dimensions and their Academic Performance

Variable	N.	The Correlations	T- Value		Level of significance
			Calculated	Tabulated	
Cognitive	40	0.78	7.68	2	significant
Affective	40	0.34	2.23	2	significant
Behavioral	40	0.79	8.01	2	significant
The Correlation	40	0.82	8.83	2	significant

4. CONCLUSIONS

One of the most important objectives of education is to obtain effective learning. Therefore, in order to increase students' achievement, it is important to check the factors that influence their performance.

The primary results of the present study show that students' engagement and their academic achievement is positively correlated with each other.

This result leads to infer that good cognitive, affective, and behavioral engagements in the classroom have several important implications.

Concerning the cognitive engagement there is high correlation between male and female students' cognitive engagement and their academic achievement. Thus, teachers have to help their students to learn how to plan out and how to study the material, review the material before the exam, ask questions in class, receive prompt feedback on assignments or other class work, create original solutions and reflect on the quality of their work, and express thoughtful ideas.

Findings also show that behavioral engagement has a strong effect on students' academic achievement (males and females do not differ significantly) and that

is why teachers should take this respect in their consideration helping students to become effective communicators in the class and by encouraging students to listen very carefully, working hard, enjoying learning new things in class, working effectively with other on the required academic work, discussing ideas with others from readings in classes and outside it, exhibiting confidence and initiating and completing a task with limited coaching, and using different style, techniques, and strategies that help students to understand the subjects.

Furthermore, findings show that there are significant differences of the students' affective dimension according to their gender and in favor of the female.

Thus, dealing with this respect, teachers have to treat students fairly (specifically with females), creating comfortable ways for asking questions, they also try to help students to build positive feelings towards the usefulness of the subjects and they learn in class and the assignment or exams they take at class.

5. RECOMMENDATIONS

The following recommendations are the starting point at which we can continue to improve our students' learning process:

1. It is necessary to relate college atmosphere with students' engagement and this dimension should be added to studies to provide a more meaningful and clearer picture of student learning.
2. Colleges should provide assistance through technical support, introducing team-teaching systems by scheduling sessions for teachers to share or discuss how different approaches can be used to engage students effectively in their learning.
3. Instructional strategies that promote active learning such as focusing on real-life skills,

interrelationships between the disciplines, and academic skill development can provide a framework for students to engage, develop their interests in their college.

4. Teachers should use at least two or more engaging approaches in every lesson to ensure students are engaged in the classroom.
5. Teachers have to recognize that changes in personal attitudes and beliefs are inevitable.
6. Teachers should be more willing to learn new techniques and change their teaching style to include engaging approaches in their lessons.
7. It is important that educators identify how the skills are taught and reinforced across the curriculum.
8. Good student-teacher relations and high expectations for student success should be built.

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APPENDIX

The Checklist of Students' Engagement

Dear student

You are kindly requested to place a check in the suitable space to better engagement in your study at your college. Please put your response to the following items. Your information will be used for research purposes only. Thank you.

Gender	Passed the course	Did not pass the course			
Dimensions	Items	never	Some-times	often	Very often
cognitive engagement	1. Before an exam, I plan out how to study the material. 2. When I'm studying, I feel mentally strong. 3. I work several examples for the same type of the material. 4. I find reviewing the material before the any exam is a good way to study for the final test. 5. If I have trouble understanding, I go over it again until I understand it. 6. I usually asked questions in class. 7. I ask myself questions to make sure I know the material that I have been studying. 8. Receiving prompt feedback from teachers on assignments or other class work is an essential issue. 9. I can work on complex problems, create original solutions and reflect on the quality of their work. 10. I can express thoughtful ideas, reflective answers and questions relevant or appropriate to learning. 11. I feel that education is important. 12. Getting good grades are essential. 13. The content which I learning in college is sufficient 14. I am getting a good education at my college. 15. I want to go to college. 16. Most of my classes are boring. 17. I am interested in the work I get to do in my classes. 18. When I revise my work, I ask myself questions to make sure I understand what it is about.				

	<p>19.I study at home even when I don't have a test.</p> <p>20.I talk with people outside of my college about what I am learning in class.</p> <p>21.I check my class work for mistakes.</p> <p>22.If I don't know or remember a concept, I do something to figure it out, like look it up my text book or notes.</p> <p>23.If I don't understand what I read, I go back and read it over again.</p> <p>24.I learn a lot from my classes.</p>				
Behavioral engagement	<p>1. When I am in class, I listen very carefully.</p> <p>2. When I am in class, I just act like I am working hard.</p> <p>3. I enjoy learning new things in class.</p> <p>4. When I work on something in class, I feel discouraged.</p> <p>5. I work effectively with other.</p> <p>6. I spend significant amounts of time studying and working on the required academic work.</p> <p>7. I like discussing ideas with others from my readings in classes and outside it.</p> <p>8.I exhibit confidence and I can initiate and complete a task with limited coaching.</p> <p>9.I like the group work.</p> <p>10. Participating in workshops is a good idea.</p> <p>11. Teachers' style, techniques, and strategies help me to understand the subjects.</p>				
Affective engagement	<p>1.I feel good about being in pass the exam successfully.</p> <p>2. I care about the exams.</p> <p>3.I feel safe in when I take any assignment or exam.</p> <p>4.Most of the things I learn in class are useless.</p> <p>5.I find my studies are full of meaning and purpose.</p> <p>6.When I am studying, I forget everything else around me.</p> <p>7.I feel happy when I am studying intensively.</p> <p>8.I feel comfortable seeking help and asking questions</p> <p>9.I am happy to be at my college.</p> <p>10.The teachers at my college treat students fairly.</p> <p>11.I like most of my teachers at college.</p> <p>12.The discipline at my college is fair.</p> <p>13.Most of my teachers care about how I am doing.</p> <p>14.Most of my teachers know the subject matter well.</p> <p>15.I feel excited by the work at my college</p> <p>16.I feel that I can go to my teachers with the things that I need to talk about.</p> <p>17.being at the department of English encourages me to do my best to achieve my academic success.</p>				