

## **Academic Compatibility in Terms of Mood Disorders in the Circumstances of the Coronavirus (Covid-19) among Students of the Faculty of Physical Education and Sports Sciences**

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### **Abstract**

The purpose of the study is to identify the degree of academic compatibility, mood disorders and moral anxiety among students, as well as to identify the differences in academic adjustment, mood disorders and moral anxiety between male and female students, as well as knowing the correlational relationships between academic compatibility, mood disorders and moral anxiety among students, and then predicting academic compatibility in terms of mood disorders among students.

The researcher followed the descriptive approach using the survey method, correlational relationships and predictive studies, and this is consistent with the requirements of his research and achieving his goals. The main research sample consisted of (120) male and female students from the third stage in the College of Physical Education and Sports Sciences at the University of Babylon for the academic year (2020-2021). By (90) male and (30) female students, they were chosen by the stratified random method. The researcher prepared two scales of academic compatibility and mood disorders according to the scientific bases used in preparing the scales. The researcher concluded that the students have academic compatibility and mood disorders close to the average, while female students have high academic compatibility, and low and stable mood disorders. There is also a strong correlation between academic adjustment and mood disorders among students, and an efficient predictive regression equation has been developed to predict the degree of students' academic adjustment in terms of the degree of their mood disorders.

**Keywords:** academic compatibility, mood disorders

### **Introduction:**

The phenomenon of compatibility is one of the important common and basic concepts in psychology in general, and mental health in particular, to the extent that it was pointed out that psychology is the science of compatibility study, the compatibility of the individual (the student) or his incompatibility with the requirements of his life situations dictated by his nature which is its psychological structure in response to those situations, and academic compatibility enjoys the attention of psychologists and researchers because of its great importance in achieving sound psychological development, whose positive effects are represented in their academic compatibility and their enjoyment of a high level of compatibility in various aspects of their lives, behavior and activity.

The student's life in general, which affects his academic compatibility, is full of difficulties, especially in light of the coronavirus (COVID-19), which hinders him from achieving his goals and satisfying his motives. He loses hope and becomes robbed of many psychological disorders

such as fear, depression, anger, shame, or self-pity, anxiety, helplessness, disappointment for his negative interpretation of life accidents, and these disorders resulting from failure and failure in the face of difficulties lead to a change and disorder in the mood and thus affect the Mood components, so that the student does not bring the student closer to achieving his goals, and does not achieve the compatibility and academic stability that he aspires to.

### **Research objective:**

- Preparing measures of academic compatibility and mood disorders for third-year students in the College of Physical Education and Sports Sciences at Babylon University
- Identifying the degree of academic compatibility and mood disorders among students.
- Identifying the differences in academic compatibility and mood disorders between male and female students.
- Identifying the correlations between academic compatibility and mood disorders among students.
- Develop an equation to predict academic compatibility in terms of mood disorders and moral anxiety among students.

### **Research methodology and field procedures:**

#### **Research Methodology:**

The researcher followed the descriptive approach using the survey method, correlational relationships and predictive studies, and this is consistent with the requirements of his research and the achievement of its objectives.

#### **Community and sample research:**

The main research sample consisted of (120) male and female students from the third stage of the morning in the Faculty of Physical Education and Sports Sciences at the University of Babylon for the academic year (2020-2021), and by (90) male and (30) female students who were chosen by the stratified random method.

#### **Search tools:**

- Academic Compatibility Scale
- Mood disorder scale

#### **Field Research Procedures:**

##### **Procedures for preparing search criteria:**

- **Academic Compatibility Scale:** After reviewing the literature and previous studies that dealt with the subject of academic compatibility, the researcher adopted the academic compatibility scale prepared by <sup>(1)</sup> which is a measure applied to a sample of students of the fourth stage of the faculties of physical education and sports sciences for some universities of the Middle Euphrates for the academic year(2019-2020), the scale consists of (45) paragraphs, each paragraph has four alternatives for the answer, which are (Fully agree, agree, disagree, absolutely disagree), and they have positive weights (1,2,3,4) and negative (4,3,2,1) . The researcher has modified the answer alternatives and modified some paragraphs to fit the research sample.
- **Mood Disorder Scale:** For the purpose of measuring and identifying mood disorders among students of the College of Physical Education and Sports Sciences, the researcher prepared a scale of mood disorders based on <sup>(2)</sup>, and it is a scale applied to a sample of players of some team games in the universities of the central and southern regions In Iraq,

the scale consists of (42) items, for each item, five alternatives are (to a very large degree, to a large extent, to a moderate degree, to a small degree, to a very low degree), and they have positive weights (1,2,3,4,5) and negative (5 ,4,3,2,1). The researcher made some modifications to some paragraphs to fit the research sample.

**Determine the validity of the paragraphs of the two scales:**

**Determining the validity of the paragraphs of the academic compatibility scale:**

For the purpose of determining the validity of the paragraphs of the modified academic compatibility scale, the researcher presented the modified scale with the original to a group of (13) experts and specialists, and after emptying all the data obtained from the forms and processing them statistically by (chi<sup>-2</sup>) test, it was found All paragraphs were valid except for (8) paragraphs. It is (40,33,30,27,17,15,9,2) because the calculated value of (Chi<sup>-2</sup>) was not significant, and thus the scale consisted of (37) paragraphs, taking into account the observations and modifications mentioned, and table (1) shows that.

Table (1) shows the opinions of experts and specialists in the paragraphs of the academic compatibility scale, the calculated value of (chi<sup>-2</sup>) and the type of significance.

variable	Paragraphs	Count Paragraphs	Agreeing	Disagreeing	Chi <sup>-2</sup> value	Sig level	Type sig
Academic compatibility	1,3,5,6,7,8,10,11,12,13,18,19,21,22,23,24,25,28,29,31,32,34,35,36,38,41,42,43,44,45	30	13	0	13	0,000	Sig
	4,14,16,20,26,37	6	12	1	9,30	0,000	Sig
	39	1	11	2	6,23	0,000	Sig
	2,9,15,17,27,30,33,40	8	10	3	3,76	0,006	Sig

**Determining the validity of the Mood Disorder Scale items:**

For the purpose of determining the validity of the paragraphs of the modified mood disorders scale, the researcher presented the modified scale with the original to a group of (13) experts and specialists. All paragraphs were valid except for (1) paragraph, which is paragraph (14) because the calculated value of (Chi<sup>-2</sup>) was not significant, and thus the scale consisted of (41) paragraphs, taking into account the notes and modifications mentioned, as show in the table (2) .

Table (2) shows the opinions of experts and specialists in the paragraphs of the mood disorders scale, the calculated value of (Chi<sup>-2</sup>) and the type of function.

variable	Paragraphs	Count Paragraphs	Agreeing	Disagreeing	Chi <sup>-2</sup> value	Sig level	Type sig
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Mood disorders	,2,3,4,6,7,8,9,10,11,12,13,15,16,17,18,19,20 ,21,22,23,24,25,26,27 ,28,29,30,31,32,33,34 ,35,36,27,28,39,40,41 42	39	13	0	13	0.000	Sig
	1,5	2	12	1	9.30	0.000	Sig
	14	1	10	3	3.76	0.006	Sig

**Prepare answering instructions for the two scales:**

The instructions for the two scales were developed that explain to the student how to answer their paragraphs, and it was taken into account in preparing these instructions that they are clear and easy to understand, and it was mentioned in the instructions to choose the response that applies to the student more than others. And not to use another colleague to answer and he was asked to answer all the paragraphs of the standards frankly and accurately, and that his answer will be strictly confidential and is for scientific research purposes only, and to ensure that their names are not written. The instructions for answering were placed on the scale without referring to the name of the scale, as Cronbach indicates that “the explicit naming of such scales may push the respondent to falsify the answer or refrain from giving an accurate answer”<sup>(3)</sup>.

**Exploratory experiment:**

The researcher conducted an exploratory experiment on (3/3/2021) on a sample of (10) students who were selected in a stratified random manner by applying the two scales through the electronic class (classroom). The purpose of this experiment was to identify the work obstacles facing the researcher during the conduct of the basic experiment, the validity of the paragraphs of the two scales, their clarity and understanding of the research sample, as well as the students’ ability to answer electronically, in order to overcome the difficulties and obstacles that accompany the implementation of the experiment’s implementation, as they were allowed to inquire about Any ambiguity in the instructions and paragraphs of the two scales and making any observation related to them, and it became clear from this experience that the instructions and paragraphs are clear, as the exploratory sample completed the answer to all the paragraphs of the two scales with an average time of (30) minutes, and thus the two scales became ready to be applied to the sample preparation for the purpose of statistical analysis.

**Apply the two scales to a sample:**

The researcher applied the experiment to a sample of (120) male and female students on (Sunday) corresponding to 7/3/2021 through the electronic class (classroom) and the electronic questionnaire (Google Drive). An external paper was answered, and then the student photographed the answer and sent it to the researcher immediately after answering on his website in WhatsApp and Telegram. After completing the application of the two scales, the researcher pulled and collected the forms in order to conduct the preliminary statistical analysis of the scales items.

**Scale correction:**

Students' answers were corrected on the academic compatibility scale using the correction key prepared for this purpose. The scale consisted of (37) items, and it contains five alternatives to the answer: (always - often - sometimes - rarely - never) and grades (1,2,3,4,5) were given respectively for the positive items and the scores (5,4,3,2,1) for the negative paragraphs, and the results of the correction showed that the arithmetic mean was (116.78), the median (114), the standard deviation (18.23), and the skew coefficient (0.417).

I also corrected the students' answers on the scale of mood disorders using the correction key prepared for this purpose. The scale consists of (41) items, and it also contains five alternatives to the answer, which are (always - often - sometimes - rarely - never) and grades (1,2,3,4,5) were given respectively for the positive items and grades (5,4) ,3,2,1) for the negative paragraphs, and the results of the correction showed that the arithmetic mean was (119.82), the median was (122), the standard deviation was (12.46), and the skewness was (-0.638).

### Statistical analysis of the paragraphs of the two scales:

#### Ability to discriminate

To extract the discriminatory ability of the two scales, the researcher used the method (the two peripheral groups) through the results of the forms of the sample numbers amounting to (120) forms, as the researcher followed the following steps:

- Arranging the students' scores on the scale in descending order from the highest score to the lowest.
- Determining a percentage of (27%) of the higher grades and (27%) of the lower grades of the forms, because this percentage achieves two groups with the maximum possible size and differentiation, as the sample in each group reached (32) students.
- Identifying the discriminatory ability for each paragraph by using the t-test for two independent samples by the Statistical Package for the Social Sciences (spss), and the T-value was considered a statistically significant indicator to distinguish the paragraph, and the two tables (3, 4) show that

Table (3) shows the arithmetic means and standard deviations of the upper and lower groups and the calculated T-value and its significance in calculating the discriminatory ability of the academic compatibility scale.

No. paragraph	Upper group		Lower group		T value	Sig level	Sig type
	Mean	standard deviation	Mean	standard deviation			
1	4.40	1.10	3.06	0.24	3.72	0.00	Sig
2	2.56	1.18	1.69	0.40	2.67	0.01	Sig
3	3.90	1.17	1.40	0.97	9.25	0.00	Sig
4	3.65	1.40	3.65	1.03	0.00	1.00	Non sig
5	4.68	1.01	4.56	0.78	-0.55	0.58	Non sig
6	2.68	1.28	1.93	0.24	3.25	0.00	Sig
7	3.34	1.36	2.68	0.82	2.65	0.01	Sig
8	4.65	0.90	4.12	1.62	1.62	0.11	Non sig
9	4.50	3.37	2.00	1.56	3.79	0.00	Sig
10	4.59	0.71	1.37	0.97	15.07	0.00	Sig
11	3.00	1.21	1.21	0.49	7.67	0.00	Sig
12	3.81	1.30	2.12	0.49	6.84	0.00	Sig
13	3.25	1.31	1.21	0.60	7.90	0.00	Sig
14	4.87	0.33	4.09	1.39	3.07	0.00	Sig
15	2.90	1.39	2.53	0.94	1.25	0.21	Non sig

16	4.37	0.94	2.00	0.71	11.34	0.00	Sig
17	4.56	0.56	3.62	0.83	5.27	0.00	Sig
18	3.81	1.09	2.40	1.01	5.34	0.00	Sig
19	3.18	1.22	3.15	1.22	-0.10	0.91	Non sig
20	3.53	0.91	1.15	0.44	13.18	0.00	Sig
21	3.75	1.36	2.84	0.80	3.22	0.00	Sig
22	4.12	0.90	3.62	0.94	2.16	0.03	Sig
23	3.90	1.25	1.53	0.87	8.77	0.00	Sig
24	4.06	1.18	2.56	0.94	5.57	0.00	Sig
25	3.65	1.03	1.59	1.21	7.31	0.00	Sig
26	3.78	1.26	2.84	0.72	3.64	0.00	Sig
27	4.50	0.87	1.31	0.59	17.00	0.00	Sig
28	3.56	1.24	2.00	0.50	6.58	0.00	Sig
29	3.62	1.26	1.25	0.67	9.38	0.00	Sig
30	4.25	1.24	3.87	0.65	1.50	0.13	Non sig
31	1.78	1.31	1.37	1.03	1.37	0.17	Non sig
32	4.34	1.00	1.21	0.79	13.82	0.00	Sig
33	4.25	1.24	1.81	1.30	7.64	0.00	Sig
34	4.90	0.39	3.75	1.66	3.82	0.00	Sig
35	4.09	1.14	2.68	0.99	5.23	0.00	Sig
36	4.35	1.18	1.87	0.84	-10.34	0.00	Sig
37	4.65	0.65	3.64	0.75	3.53	0.00	Sig

It is clear from Table (3) that the items of the academic compatibility scale were distinct, which indicates the acceptance of all of them, depending on the calculated (t) values and the significance level that came less than the significance level (0.05), except for (7) items that were undistinguished depending on The calculated (t) values and the significance level at which it came is greater than the significance level (0.05), and thus the scale consists of (30) items.

Table (4) shows the arithmetic means and standard deviations of the upper and lower groups and the calculated T-value and its significance in calculating the discriminatory ability of the mood disorders scale

No. paragraph	Upper group 27%		Lower group 27%		T value	Sig level	Sig type
	Mean	standard deviation	Mean	standard deviation			
1	3.09	1.17	2.90	0.92	-0.70	0.48	Non sig
2	4.50	0.76	3.09	1.17	5.68	0.00	Sig
3	4.28	1.11	2.78	1.53	4.46	0.00	Sig
4	2.71	1.07	2.62	1.32	-0.31	0.75	Non sig
5	4.21	1.17	2.81	1.26	4.33	0.00	Sig
6	5.56	0.94	3.12	1.33	4.95	0.00	Sig
7	3.18	0.89	2.43	0.98	3.19	0.00	Sig

8	4.50	0.95	4.50	0.80	0.00	1.00	Non sig
9	2.40	1.04	1.65	1.03	2.88	0.00	Sig
10	2.50	1.07	1.96	0.89	2.14	0.03	Sig
11	4.40	0.83	2.96	1.37	5.04	0.00	Sig
12	3.09	1.56	2.06	0.92	-3.20	0.00	Sig
13	4.50	0.95	3.71	1.34	2.67	0.00	Sig
14	4.43	0.98	2.53	1.07	7.39	0.00	Sig
15	3.25	1.27	2.71	1.38	-1.60	0.11	Non sig
16	2.78	0.87	2.40	1.28	-1.36	0.17	Non sig
17	4.40	0.97	2.78	1.40	5.36	0.00	Sig
18	2.40	0.87	1.62	1.00	3.31	0.00	Sig
19	2.15	0.73	2.09	1.43	-0.21	0.82	Non sig
20	4.12	1.45	1.78	1.06	7.34	0.00	Sig
21	2.03	1.46	1.90	0.92	0.40	0.68	Non sig
22	2.40	1.23	1.65	1.16	-2.50	0.01	Sig
23	2.65	1.03	1.87	1.28	2.67	0.01	Sig
24	3.06	0.84	2.96	1.28	0.34	0.73	Non sig
25	3.21	1.06	2.34	0.86	3.59	0.00	Sig
26	3.37	1.23	1.96	1.12	-3.37	0.00	Sig
27	4.28	1.14	3.15	1.41	3.49	0.00	Sig
28	4.21	1.21	1.62	1.03	9.19	0.00	Sig
29	4.31	1.25	3.09	1.02	4.25	0.00	Sig
30	3.65	0.97	2.93	1.36	2.42	0.01	Sig
31	3.06	1.50	1.59	1.01	3.46	0.00	Sig
32	3.12	0.87	1.53	0.80	7.61	0.00	Sig
33	1.84	1.37	1.25	0.80	2.11	0.03	Sig
34	3.28	0.77	2.28	1.46	3.41	0.00	Sig
35	2.59	0.97	1.53	0.87	4.56	0.00	Sig
36	3.65	0.82	1.65	1.15	7.97	0.00	Sig
37	3.12	0.79	2.34	1.09	3.26	0.00	Sig
38	4.53	1.01	2.84	1.11	6.34	0.00	Sig
39	3.03	0.64	2.46	1.50	1.94	0.05	Sig
40	3.00	0.56	2.90	1.55	0.32	0.74	Non sig
41	4.12	1.31	2.46	1.41	4.85	0.00	Sig

The results of Table (4) show that most of the paragraphs of the mood disorders scale were distinguished. So it was accepted, depending on the calculated (t) values and the level of significance which came smaller than the level of significance (0.05), except for (9) paragraphs that were undistinguished depending on that the calculated (t) values and the significance level that came at it is greater than the significance level (0.05), and thus the scale consisted of (32) items.

**Internal consistency coefficient:**

The internal consistency was ascertained by calculating the correlation relationship between the degree of the paragraph and the total score of the two scales, as the Pearson correlation coefficient was used in that and for all members of the sample numbering (120) male and female students by means of the Statistical Package for the Social Sciences (spss), and the two tables (5, 6) show that.

Table (5) shows the values of the correlation coefficient between the paragraph score and the total score of the academic compatibility scale.

No. paragraph	correlation coefficient	Level sig	Type sig	No. paragraph	correlation coefficient	Level sig	Type sig
1	0.17	0.05	Sig	20	0.61	0.00	Sig
2	0.28	0.00	Sig	21	0.30	0.00	Sig
3	0.64	0.00	Sig	22	0.23	0.01	Sig
4	-	-	Failed by the previous procedure	23	0.60	0.00	Sig
5	-	-	Failed by the previous procedure	24	0.50	0.00	Sig
6	0.34	0.00	Sig	25	0.51	0.00	Sig
7	-	-	Failed by the previous procedure	26	0.36	0.00	Sig
8	0.27	0.00	Sig	27	0.74	0.00	Sig
9	0.43	0.00	Sig	28	0.51	0.00	Sig
10	0.73	0.00	Sig	29	0.64	0.00	Sig
11	0.45	0.00	Sig	30	-	-	Failed by the previous procedure
12	0.51	0.00	Sig	31	-	-	Failed by the previous procedure
13	0.49	0.00	Sig	32	0.73	0.00	Sig
14	0.29	0.00	Sig	33	0.53	0.00	Sig
15	-	-	Failed by the previous procedure	34	0.42	0.00	Sig
16	0.65	0.00	Sig	35	0.48	0.00	Sig
17	0.42	0.00	Sig	36	0.30	0.00	Sig
18	0.45	0.00	Sig	37	0.12	0.08	Non sig
19	-	-	Failed by				



			the previous procedure				
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The results of Table (5) show the values of the correlation coefficient calculated between the degree of each paragraph in the total score of the scale, which was a function of all paragraphs because the values of the significance level were smaller than the significance level (0.05), except for paragraph (37) and thus the number of acceptable paragraphs became (29) paragraphs.

Table (6) shows the values of the correlation coefficient between the paragraph score and the total score of the mood disorders scale.

No. paragraph	correlation coefficient	Level sig	Type sig	No. paragraph	correlation coefficient	Level sig	Type sig
1	-	-	Failed by the previous procedure	22	-0.20	0.04	Sig
2	0.43	0.00	Sig	23	0.21	0.03	Sig
3	0.28	0.00	Sig	24	-	-	Failed by the previous procedure
4	-	-	Failed by the previous procedure	25	0.32	0.00	Sig
5	0.11	0.09	Non Sig	26	0.30	0.00	Sig
6	0.46	0.00	Sig	27	0.29	0.00	Sig
7	0.23	0.01	Sig	28	0.62	0.00	Sig
8	-	-	Failed by the previous procedure	29	0.35	0.00	Sig
9	0.30	0.00	Sig	30	0.25	0.00	Sig
10	0.18	0.04	Sig	31	0.13	0.08	Non Sig
11	0.48	0.00	Sig	32	0.47	0.00	Sig
12	-0.22	0.03	Sig	33	0.20	0.05	Sig
13	0.30	0.00	Sig	34	0.38	0.00	Sig
14	0.48	0.00	Sig	35	0.37	0.00	Sig
15	-	-	Failed by the previous procedure	36	0.57	0.00	Sig
16	-	-	Failed by	37	0.34	0.00	Sig

			the previous procedure				
17	0.50	0.00	Sig	38	0.52	0.00	Sig
18	0.32	0.00	Sig	39	0.27	0.00	Sig
19	-	-	Failed by the previous procedure	40	-	-	Failed by the previous procedure
20	0.50	0.00	Sig	41	0.46	0.00	Sig
21	-	-	Failed by the previous procedure				

The results of Table (6) show the values of the correlation coefficient calculated between the degree of each paragraph in the total score of the scale, which was a function of all paragraphs because the values of the significance level were smaller than the significance level (0.05) with the exception of paragraphs (5, 31), and thus the number of valid paragraphs became (30) a paragraph.

### Psychometric properties of scales:

The validity of the two scales:

The researcher adopted two types of validity to verify the validity of the two scales:

- **Content Validity (Experts):** The content validity was confirmed by presenting the items of the two scales to a group of experts in educational and sports psychology, testing and measurement, and most experts agreed on the validity of the items of the two scales.
- **Validity of the hypothetical formation:** This validity was verified in the two scales through statistical analysis of the items by calculating the discriminatory ability and the internal consistency coefficient for the items.

### Stability of the two scales:

Stability was calculated using two methods:

- **Half-split method:** This method depends on dividing the test whose stability is required to be determined into two equal parts after applying it to one group. The two halves by extracting the t-value for them, its calculated value for the academic compatibility scale reached (1,128) and for the mood disorders scale (1,144). When comparing it with the tabular value of (F) at two degrees of freedom (119,119) and a level of significance (0.05), it turns out that it has no statistical significance. Then extract the correlation coefficient between the total scores of the two halves using Pearson's method by the Statistical Package for the Social Sciences (spss), The correlation coefficient was (0.81) for the academic compatibility scale and (0.80) for the mood disorders scale. Since the extracted correlation coefficient means stability for only half of the test, and in order to obtain complete stability of the test, the Spearman-Brown equation was applied, thus the value of the test reliability coefficient reached (0.89) for the academic compatibility scale and (0.88) for the mood disorders scale. They are high indicators of stability.

**Cronbach's alpha coefficient:**

The equation was applied to a sample of (120) male and female students using by the Statistical Package for the Social Sciences (spss),and it appeared that the value of the stability coefficient of the academic compatibility scale was (0.91) and mood disorders (0.90), which is a high indicator of stability.

**Main experience:**

In order to achieve the rest of the research objectives, the researcher applied the main experiment using the two scales in their final form through (Classroom) on the main research sample of (120) male and female students on (Sunday) corresponding to 3/21/2021 (in the same way as the experiment of preparing the two scales), then The forms were checked, corrected, and their data was filled in special forms, after which the statistical processing of the data was carried out as required by the research objectives.

**Statistical means:**

The researcher used the Statistical Package for the Social Sciences (spss),to extract the research results through the use of the following statistical laws: arithmetic mean, standard deviation, simple correlation coefficient (Pearson), chi-square, skew coefficient, standard error, t-test for one sample, test (v) For independent samples, Cronbach's alpha coefficient, Spearman-Brown equation, predictive linear equation.

**Presentation and discussion of the results:**

**Presentation and discussion of the results of academic compatibility scores and mood disorders:**

For the purpose of identifying the results of academic compatibility scores and mood disorders among students, the achieved arithmetic means were compared with the hypothetical mean of the scale by calculating the differences between them using a one-sample t-test and the two tables (7, 8) show that.

Table (7) shows the significance of the differences between the arithmetic mean of the sample and the hypothetical mean, and the statistical significance in the academic compatibility of the students.

Variables	Sample	No. sample	Arithmetic mean	Standard deviation	hypothetical mean	T value	Sig level	Sig type
academic compatibility	students	90	85,73	16,73	87	0,71	0,475	Non sig
	female students	30	98,46	16,13	87	3,89	0,001	Sig
	all students	120	88,91	17,42	87	1,20	0,231	sig

By noting Table (7), it becomes clear to us that the students have a weakness in academic compatibility despite the convergence of the average score, and that the female students have good academic compatibility, and that the students, in general, have academic compatibility close to the hypothetical mean of the scale.

The researcher attributes the reason for the poor academic compatibility among students to the lack of sports activities and practical lessons and the feeling of constant anxiety in light of the Coronavirus, and that most of the study subjects are difficult to understand in light of the adoption of electronic study, which leads to a low level of performance, and this was confirmed by (Mustafa Hussein) <sup>(4)</sup> The result of a decrease in the level of performance as a result of achieving a number, time, or a small distance, which is usually followed by reprimanding oneself and blaming others, and a feeling of discomfort and self-satisfaction, and this, in turn, leads to poor academic compatibility <sup>(4)</sup>. While there are some students who have good academic compatibility through high arithmetic circles, it was found that students with high scholastic compatibility are more positive in their thinking about themselves, study events, competition, conditions and the environment in which they live, and they focus on success and proper compatibility.

The researcher attributes the reason for the students' enjoyment of good academic success to the fact that the electronic study is consistent with their tendencies and interests in light of the presence of the Coronavirus and the strong desire for electronic study, which in turn helps the students to save time, which reduces effort and fatigue, which in turn leads to excellence and a feeling of satisfaction <sup>(4)</sup>. that high achievement is usually followed by a feeling of satisfaction from those around it, whether teachers or colleagues, and this in turn leads to the student's self-confidence and his feeling of satisfaction, and thus achieving academic compatibility <sup>(4)</sup>.

Table (8) shows the significance of the differences between the arithmetic mean of the sample and the hypothetical mean and the statistical significance in the mood disorders of the students.

Variables	Sample	No. sample	Arithmetic mean	Standard deviation	hypothetical mean	T value	Sig level	Sig type
mood disorders	students	90	89,84	13,39	90	0,11	0,912	Non sig
	female students	30	83,60	12,03	90	2,91	0,007	Sig
	all students	120	88,28	13,29	90	1,41	0,160	Non sig

By noting Table (8), it becomes clear that students have moderate mood disorders, female students do not have mood disorders, and students, in general, have moderate mood disorders.

By noting Table (8), it becomes clear that students have moderate mood disorders, female students do not have mood disorders, and students, in general, have moderate mood disorders.

The researchers attributes the presence of mood disorders among students to the negative interpretation of life accidents, a lot of responsibility, a lack of self-esteem and the presence of many stressful stimuli that encounter it, as well as the fear of failure in studies and what is accompanied by practical lessons during training and the acquisition of skills and planning abilities, as well as physical and psychological preparation for exams and tests and the responsibility placed on This, is due to their preoccupation with thinking about events and changes in light of the Coronavirus , electronic study and loss of hope, and the accompanying fear, anxiety and tension, and this contributes to their high mood disorders, and (Abdul Rahman Ibrahim, 2008)<sup>(5)</sup> confirmed that one of the causes of mood disorders is a loss of self-esteem and loss of hope. And the negative interpretation of the accidents of life <sup>(5)</sup>.

The researcher attributes the reason for the female students enjoying a few mood disorders, due to the interest in self-esteem and interest in preparing lessons in light of the electronic study, and the accompanying lack of fear of the difficulty of the exam, which causes a moderate mood, as well as the lack of nervousness in the face of unexpected situations in the practical or theoretical side of the study, and therefore lack The presence of tension or making mistakes at work, and this leads to moderation of mood.

### **Presenting and discussing the results of the differences in academic adjustment and mood disorders between male and female students:**

For the purpose of identifying the differences between male and female students in academic compatibility and mood disorders, the arithmetic means achieved were compared by calculating the differences between them using the (t) test and Table (9) shows this.

Table (9) shows the significance of the differences between male and female students in academic compatibility and mood disorders.

Variables	Sample	No. sample	Arithmetic mean	Standard deviation	T value	Sig level	Sig type
Academic compatibility.	students	90	85,73	16,73	3,64	0.000	Sig
	female students	30	98,46	16,13			
mood disorders	students	90	89,84	13,39	2,26	0,025	Sig

	female students	30	83,60	12,03			
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Table (9) shows that there is a statistically significant difference in academic compatibility between male and female students and in favor of female students, meaning that female students have better academic compatibility than male students. It is also noted that there is a statistically significant difference in mood disorders between male and female students and in favor of male students. This means that students have a higher level of mood disorders than female students

**Presentation of the results of the correlation coefficient between academic adjustment and mood disorders among students:**

Table (10) shows the values of the simple correlation coefficient between academic achievement and mood disorders among students.

Variables	R value	Level sig	Type sig
Academic compatibility-mood disorders	-0,733*	0,000	sig

The results of Table (10) show that the value (R) calculated to calculate the correlation coefficient between academic success and mood disorders among students was statistically significant, as the significance level (Sig) was less than the significance level (0.05). This indicates a strong correlation between the two variables and is one of the important indicators that enable the researcher to make predictions. The emergence of a correlative relationship between mood disorders and academic adjustment can be attributed to the influential role of mood disorders that were clarified by the sample responses. It may be a result of life's anguish, failure and failure in facing difficulties that do not bring them closer to achieving their goals, negative interpretation of life accidents, and poor ability to perform physically, socially and at work, especially in light of the Coronavirus, electronic study, environmental conditions and lack of social support.

**Presentation and discussion of linear regression equation indicators for predicting academic fit by mood disorders:**

The researchers used the simple linear regression equation for the purpose of arriving at predictive equations, and table (11) shows the values of the (predictive) simple regression equation concerned with the relationship between academic adjustment and mood disorders, and the proportion of the contribution of mood disorders to students' academic adjustment, and table (12) shows the predictive equation.

Table (11) shows the correlation coefficient and the percentage of the contribution of mood disorders to the students' academic compatibility.

Variables		correlation coefficient R	Contribution ratio R2	Standard deviation	F value	degree of freedom	level sig
dependent	independent						
academic	mood	0,733	0,538	9,07	137,30	118-1	0,000

compatibility	disorders						
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It is clear from Table (11) that the proportion of the contribution of mood disorders to the students' academic compatibility was good, and this is confirmed by the calculated F value of (137,30), which indicates that the co-variance between the variables was large, as the value of (F) was a statistical function. At the level of significance (0.000), which is less than (0.05), which is an important indicator of the predictive quality indicators. Figures (1) and (2) show the nature of the sample distribution and the simple regression line between the two variables.

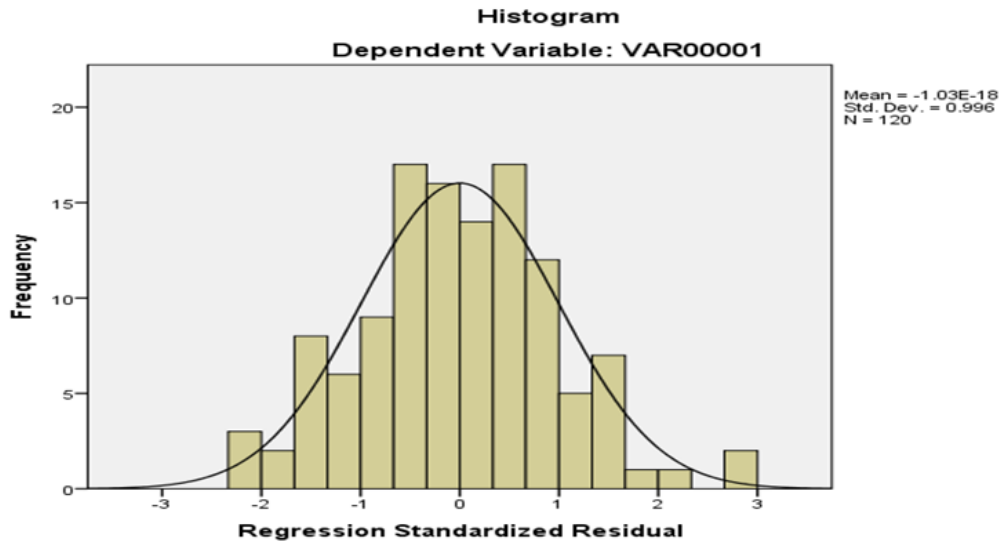


Fig.(1)shows the normal distribution of the sample.  
**Normal P-P Plot of Regression Standardized Residual**

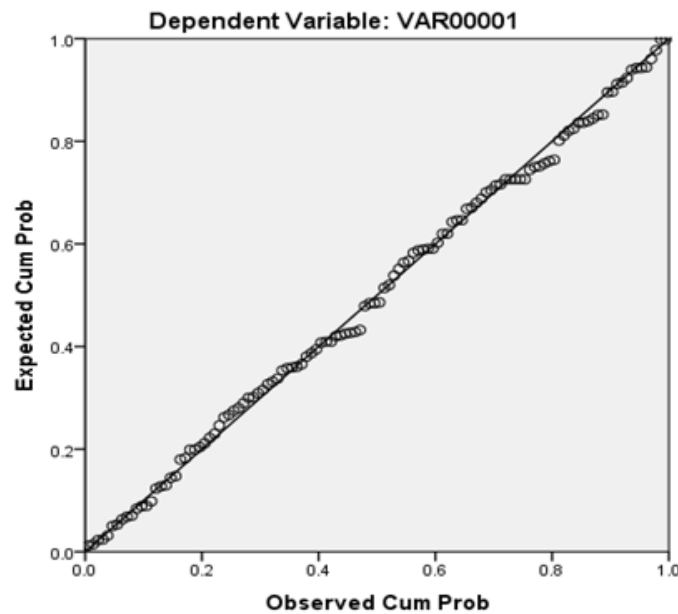


Fig. (2) Represents the simple regression line between the two variables

Table (12 shows the predictive regression equation for academic adjustment through the mood disorders of students.

Variables	coefficients		T value	Level sig	Type sig
	Nature coefficient	Value coefficient			
mood disorders	A	138,046	31,90	0,000	Sig
	B	- 0,560	11,71	0,000	Sig
Predictive regression equation	Academic compatibility = the value of the constant-coefficient (A) + (B x the degree of the student's .(mood disorders on the scale				

Table (12) shows that the constant amount of the mood disorders variable is significant in its relationship to academic compatibility. It indicates an inverse relationship between the two variables. An increase in the degree of mood disorders in parameter (B) is offset by a decrease in the students' academic compatibility. Meaning that an increase in the degree of mood disturbances (-0.560) is accompanied by a decrease in the degree of academic compatibility by (1) degrees. As for the coefficient (A) in this equation, which represents a fixed amount, it expresses the degree of academic compatibility by (138,046) when the degree of mood disorders (the predictor) associated with this variable, which is the compatibility, is (zero). It was also shown from Table (12) the significance of the regression parameters by testing them with a value (t), which appears to be a function at the level of significance (0.000). To ensure the efficiency of the predictive regression equation, we give the following applied example:

If we assume that the score of one of the students in the mood disorders scale was (88), then his expected score according to the academic agreement is as follows:

Academic compatibility =  $138.046 + (-0.560 \times 88) = 88.76$ , which is almost equal to the arithmetic mean score of the sample on the academic fit scale of (88.91).

### Conclusions:

- Students of the College of Physical Education and Sports Sciences at the University of Babylon have academic compatibility and mood disorders close to the hypothetical mean of the scale.
- The female students have high academic compatibility and low mood disorders.
- Female students have better academic compatibility than male students, and male students are moodier than female students.
- There is a strong correlation between academic compatibility and mood disorders among students.
- The researchers were able to develop an efficient predictive regression equation in predicting the degree of students' academic compatibility in terms of their mood disorders.

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### Appendix

#### Appendix (1)

#### Academic Compatibility Scale in its final form

Dear Student... Greetings

In the scale instructions below, the researcher requests you to read them carefully in order to accurately answer the paragraphs of the scale, which is not to mention the name, and answer all the paragraphs by placing a mark (√) in the field that applies to you in front of each paragraph, and that your answer will be strictly confidential and is for research purposes

Scientific only.

With thanks and gratitude

No.	Paragraphs	Always	frequently	Sometimes	Scarcely	never
1	My university studies are in line with my tendencies and interests, even with the coronavirus					
2	I think that most of the subjects are difficult to understand in light of the adoption of electronic studies					
3	My colleagues ignore me in some situations during the lecture					
4	I get tired quickly if I have too many problems					
5	I have a strong desire to study everything related to physical education					
6	I think the teachers feel the affection for me					
7	I prefer to be absent from practical lectures whenever I can					

8	I usually feel embarrassed to contact teachers					
9	I'd rather live in a dream world than think about reality					
10	I feel that the future is dark for me in light of the coronavirus					
11	I find encouragement from my parents to study and attend it in spite of the coronavirus					
12	My parents think most of my actions are wrong					
13	I feel bored and upset while learning math skills					
14	I prefer to spend most of my studying time playing games					
15	I get distracted a lot during the electronic lecture					
16	I get a headache for no reason during the lecture					
17	I feel like falling asleep during the electronic lecture					
18	I often hesitate to ask the teacher what I don't understand					
19	I'm afraid to answer the teacher's question even though I know the right answer					
20	I feel tired from too many electronic lectures					
21	I have a great desire to get out of the practical lecture for fear of catching the epidemic					
22	I rely on others to do my homework					
23	I get so upset when I take exams that I can't study					
24	I get annoyed with sticking to the school system when I see the spread of the epidemic					
25	I feel miserable					
26	I'm trying to cheat in the online exam because there is no sergeant					
27	I consider myself a naughty person in the electronic lecture					

28	I think lying is the best way for a person to get rid of his problems					
29	My resolve weakens when I fail for the first time in a certain business					

Appendix (2)

Definitive Mood Disorder ScaleDear Student... Greetings

In the scale instructions below, the researcher requests you to read them carefully in order to accurately answer the paragraphs of the scale, which is not to mention the name, and answer all the paragraphs by placing a mark (√) in the field that applies to you in front of each paragraph, and that your answer will be strictly confidential and is for research purposes Scientific only.

With thanks and gratitude

No.	Paragraphs	Always	frequently	Sometimes	Scarcely	never
1	I get nervous if I make any mistakes in my work					
2	I don't find it difficult to deal with strangers					
3	I get annoyed when my teacher criticizes me					
4	I am good at quickly analyzing complex situations around me					
5	My love for sports makes me excel at it					
6	I'm one of those people who take things simple and uncomplicated					
7	I have insomnia and difficulty sleeping because I am busy thinking about exams					
8	My intense sense of the feelings of my colleagues makes me pity them					
9	I feel bad when my class performance is poor					
10	I get frightened and upset faster than my other colleagues					
11	I get nervous in some unexpected situations					
12	I take care of preparing my					

	lessons even if I fail the exam					
13	I compete as hard as I can in exams even if I'm not sure of success					
14	I tolerate my fellow students despite their wrong actions against me					
15	I use my positive emotions to interact with others					
16	I get confused every time I think about the exam					
17	I can contain all the feelings of stress that hinder my performance in my lessons					
18	Unfortunately, I am one of those people who get angry quickly					
19	I think that studying is meaningless when I see the spread of the epidemic among people					
20	I get frustrated when things don't go well					
21	I feel annoyed as a result of colleagues criticizing my performance					
22	I can easily switch from negative to positive emotions					
23	I try to be nice to everyone I meet					
24	I can't keep my cool when my teacher annoys me in class					
25	I can achieve success even with the epidemic					
26	I lose my temper easily during class					
27	I'm always in a good mood					
28	My face blushes or changes easily					
29	I worry about what other people think of me					
30	I am afraid that the exam will be difficult					