

A COMPARATIVE STUDY IN OPTIMISM, PESSIMISM & FEAR ACCORDING TO A NUMBER OF BLOOD GROUPS FOR THE 2nd YEAR FACULTY OF PHYSICAL EDUCATION STUDENTS, SALAHELDIN UNIVERSITY / ARBIL

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Abstract

The study aims to:

- Show differences' significance in optimism – pessimism variable for the 2nd year students according to a number of blood groups.
- Show differences' significance in fear for the 2nd year students according to a number of blood groups.

The researcher used the descriptive method. As for the population of the study, it is a sample of the 2nd year students from the Faculty of Physical Education (167 students) chosen randomly. Concerning tools of the study, the researcher used optimism – pessimism and fear scales as well as identifying a number of blood groups for the students (A+, O+ & B+). The researcher extracted validity and reliability of tests with the use of SPSS statistical method. The most important conclusions are:

- 1- Average fear level for students in the study sample.
- 2- Some blood groups with average level of optimism and some other groups with pessimism.
- 3- The O+ blood group showed average fear level compared with A+ and B+ for female students.
- 4- The O+ & B+ blood groups showed optimism, while female students with A+ group showed pessimism.
- 5- The sample of the study of students showed average fear level according to blood groups less in level for B+, O+ and then A+ group.
- 6- The sample of the study of students showed optimism for B+, O+ and then A+ group showed pessimism.
- 7- The study showed significant differences for the sake of O+ group for female students in optimism and pessimism and significant differences for A+ group in terms of optimism – pessimism and fear levels.

KEYWORDS: (Optimism – Pessimism). Fear and blood group.

1. INTRODUCTION & PROBLEM OF THE STUDY

Young people at the first world countries are considered the basic structure of society as they perform the main role in work and with efficiency and they need to enjoy physical and psychological health in addition to important aspects of personality that affect their attitudes in positive work and human behavior. Sport psychology is about any activity done by man whether mental, social, psychological or motor activities. At the same time, these activities are accompanied with physical and psychological variables affecting emotional and mental conditions in different situations. Fear is one of the psychological variables that are one of the effective psychological cases affecting people at certain situations and it is sometimes necessary and normal as a reaction sometimes. Fear is related to physiological and behavioral responses. Fear can result in positive or negative behaviors as it is linked to positive reactions that make it ready to attack, but in case of extreme fear individuals react with negative defensive reactions taking the form of escaping or refusal. (Kamel Lewis: 1993, 212).

The concepts of optimism and pessimism are relatively new concepts in the field of psychological specializations and are considered personal variables with relatively consistent importance. The concepts of optimism and pessimism are being greatly concerned at present because they are related to personal disorders. Optimism is positively related to control pressures and successful problem-solving, while pessimism is suffering from distress and low confidence (Charyton: 2009, 66). In addition, fear is one of the psychological conditions that individuals go through especially in life-threatening situations. Fear is the psychological condition that comes at the time of a sudden or life-threatening situation (Nezar & Kamel: 2000, 35).

Among the related psychological studies, there is the study of Shilton as he described physical structure as the most important in explaining human behavior and hypothesis of Cattle & Young saying that there is a possible relation between blood group and personality including psychological variables. In addition, the study of Ezink who said that scientific attempts to link between blood groups and psychological variables include studies and researches that seek to reach specific psychological conditions which may be represented in depression, anxiety, fear, optimism or pessimism. Hence, the study is significant in determining the relation between blood groups and optimism, pessimism and fear for the Faculty of Physical Education's students to determine their understanding and behaviors. This is the first study in this field and can be considered as studying behavioral attributes to understand nature and characteristics of students' behaviors according to their blood groups. The problem of the study lies in that the education

process in its various stages, especially in university stage, represents real support of personality development with its various attributes. Through personality theories, individuals are consisting of relatively stable attributes included in their utterances and behaviors. These attributes are shared factors of genetic and environmental factors as genetics and individual experiences combine together.

Through scientific attempts in some Arabic and foreign studies, we find that Hondlbi formulated the relation between blood groups with human behavior, psychological variables and personality attributes. The researchers conducted the study to identify this relation in 2nd year students of the Faculty of Physical Education and explain the causative relation to be a new addition in modern psychological literature in physical education sciences. The study aims to explore:

- 1- Differences' significance in (optimism & pessimism) and fear for 2nd year students according to a number of blood groups.
- 2- Differences' significance in fear for the 2nd year students according to a number of blood groups.

2. METHODOLOGY

The study used the descriptive method using a comparative method to suit the nature of the study because descriptive method depends on studying reality or phenomena as they are in reality with accurate description and protected expression (Ismail: 2010, 11).

Population & Sample of the Study:

The sample of the study was selected from the 2nd year students from the Faculty of Physical Education, Salaheldin University / Arbil (167 male and female students) for the academic year 2014 – 2015. Enrollment and registration statistics shows that they are distributed in four groups and according to requirement of the study and then the sample to be chosen purposefully due to blood groups (A+, B+, O+, AB+) as the sample was distributed in the first three groups, but the last group (AB+) did not appear in the sample (104 students) as shown in table (1). It shows the number of the main sample (84 female and male students) with exploratory trial on 20 of the 2nd year students out of the main sample of the study.

Table 1 shows the sample of the study with exploratory trial

Sample	Blood Group		
	O+	B+	A+
Female students	14	5	8
Male students	34	6	17

Fear Scale:

This scale was prepared by Mohamed Abdo, 1992 and used by Eiad Nasser: 2012, 10 in physical education. It was applied on the Faculty of Physical Education and university students. It is consisted of 20 sections and 5 alternatives (always, often, sometimes, rarely, never) with grades from 1 to 5 according the highest degree (100) on the scale and the less one is 20.

Optimism & Pessimism Scale:

After reviewing references and resources in literature regarding optimism and pessimism scale, the researcher used the one designed by Afraa Ibraim: 2008, 20 to be applied on university students. It consisted of 32 sections and 5 alternatives (always, often, sometimes, rarely, never) with grades (1 – 2- 3- 4- 5) consecutively for positive sections and the same for negative ones. Total degree of the scale is 32 – 160 and (96) for the theoretical average. We should also refer to the trend towards optimism as the less the degree is, the trend towards pessimism will increase.

Main Trial:

The scales were applied in the final form on the main sample (84 male and female students) of the 2nd year and due to blood groups as scale (optimism & pessimism) and fear forms were distributed after explaining the way of answering the scales by checking (√) in front of each section considered suitable for the respondent and then scales were joined with degrees.

3. RESULTS AND DISCUSSION

Results of differences in (optimism & pessimism) and fear for the 2nd year female students, Faculty of Physical Education due to a number of blood groups:

Table (2): Means and standard deviation (optimism & pessimism) of a number of blood groups:

Blood group Variables	Measuring Unit	A+		B+		O+	
		Mean -	S.D ±	Mean -	S.D ±	Mean -	S.D ±
Fear	Degree	65	4,898	68	8,074	62	6,536
Pessimism & Optimism	Degree	87,250	5,970	98,200	5,890	101,857	12,476

The above table shows that there is an average level of the sample of female students due to fear scale degrees, but the difference is due to blood groups as O+ group sample possess less level than in A+ and B+. This is explained in the psychological variables,

especially fear, for the female students differ according to individual differences as this depends on behavior, environment and genetic factors. Scientists showed that there are effects of personal elements, especially fear and anxiety related to the environment we live in.

The study of Jogawar: 1983, 216 asserted that the respondents with B+ group obtained higher degrees than psychological disorders, fear and emotions, while the rest of blood groups obtained less degrees than fear and differ according to gender. As for the optimism – pessimism scale, high degrees show that this sample own more optimism compared with less degrees showing pessimism. Table (2) shows that A+ group sample’s female students are characterized with pessimism, while groups B+ and O+ have optimism according to the scale with arithmetic mean of 96. This shows that if the degree is more than the average it refers to optimism in the sample and vice versa, but optimism was significant in O+ group students due to good socialization methods. The study of Katz: 2005, 10 asserted that there is a presence of a specific pattern of psychological and social attributes for each group as O+ was characterized by openness and positivity, B+ was characterized by activity and optimism, while the study of McCoy: 2004, 10 asserted that A+ group students are the most likely to be pessimistic and emotional.

Results of Fear Variable for Female Students Due to a Number of Blood Groups:

Table (3) analysis of contrast among the three groups in blood groups at fear scale for female students:

Serial	Contrast source	Freedom degree	Total Squares	Average Squares	F counted Value	Sig Value
1	Inter-group	2	150,219	75,109	1,831	0,182
2	Intra-group	24	984,300	41,012		
3	Total	26	1134,519			

* significant if sig value is ≤ 0.05

Table (3) shows that there are no statistically significant differences in fear level for female students due to blood groups.

Results of (optimism – pessimism) Variable for Female Students Due to a Number of Blood Groups:

Table (4) analysis of contrast among the three groups in blood groups at (optimism – pessimism) scale for female students:

Serial	Contrast source	Freedom degree	Total Squares	Average Squares	F counted Value	Sig Value
1	Inter-group	2	109,393	548,697	5,460	0,011
2	Intra-group	24	2412,014	100,501		
3	Total	26	3509,407			

* significant if sig value is ≤ 0.05

Table (4) shows that sig value is 0.011 which is less than 0.05 value and this means that there are differences in (optimism – pessimism) variable for female students due to blood groups, so the researcher resorted to the use of the Least Significant Difference LSD test.

Table (5) difference in average of total blood groups in (optimism – pessimism) variable using the LSD test for female students:

Serial	Blood Groups	Mathematical sums	Means differences	Sig	Significance
1	A+ - B+	98,200-87,250	10,950-	0.067	Insignificant
2	O+ - A+	87,250-101,857	14,607-	0.003	Significant
3	O+ -B+	98,200-101,857	3,657-	0.491	Insignificant

* significant if sig value is ≤ 0.05

Table (5) shows differences in groups averages in a number of blood groups at (optimism – pessimism) scale showing O+ group as the most group for female students. The sample of the study was characterized with optimism and this can be explained by people of this group being more sociable than others in A+ and B+ groups. They also have open, active and self-confident personalities. The study of Gupla, 1990 was about determining the relation between blood groups and personal attributes showed that O+ students are more balanced and optimistic than others in addition to the study of Ziad Barakat: 2007, 22 that asserted that O+ group students are more likely to be optimistic and less likely to have depression.

Results of differences in (optimism – pessimism) Variable for Female Students Due to a Number of Blood Groups:

Table (6) Arithmetic means and standard deviations in blood groups at (optimism – pessimism) scale for female students:

Variables	Blood group	Measuring Unit	A+		B+		O+	
			Mean -	S.D ±	Mean -	S.D ±	Mean -	S.D ±
Fear	Degree		67,058	7,725	63,166	5,564	66	8,104
			86,470	10,819	99,500	9,934	100,545	9,367
Pessimism & Optimism		Degree	86,470	10,819	99,500	9,934	100,545	9,367

Results showed that students were characterized by an average level of fear and the least fear level was for B+ group and then O+ and A+ groups. This results asserts results of the study of Esysenk: 1982, 531 which found that emotion related positively with B+ group, while the study of Neumann: 1992, 88 showed that respondents of A+ group obtained more than high marks in anger, fear

and anxiety more than the O+ group respondents. As for the optimism – pessimism scale according to blood groups, the A+ group was characterized by pessimism unlike B+ and O+ groups and the scale is more than 96 so it tends to optimism.

Discussion of Results of Differences in the Fear variable for students due to a number of blood groups:

Table (7) analysis of contrast among the three groups in blood groups at the fear scale for students:

Serial	Contrast source	Freedom degree	Total Squares	Average Squares	F counted Value	Sig Value	Significance
1	Inter-group	2	67,208	33,604	0,555	0.578	insignificant
2	Intra-group	53	3211,775	60,600			
3	Total	55	3778,982				

* significant if sig value is ≤ 0.05

Table (7) shows that there are insignificant differences in fear scale for students according to contrast in the three blood groups.

Results of (optimism – pessimism) Variable for Students Due to a Number of Blood Groups:

Table (8) analysis of contrast among the three groups in blood groups at (optimism – pessimism) scale for students:

Serial	Contrast source	Freedom degree	Total Squares	Average Squares	F counted Value	Sig Value
1	Inter-group	2	2297,636	1148,818	11,878	0,000
2	Intra-group	53	5125,917	96,715		
3	Total	55	7423,554			

* significant if sig value is ≤ 0.05

Table (8) shows that there are no significant differences in optimism – pessimism scale for students, so the researchers resorted to the LSD.

Table (9): Difference in means and total blood groups in (optimism – pessimism) variable using the LSD for students

Serial	Blood Groups	Mathematical sums	Means differences	Sig value
1	A-B	99,500-86,470	13,03	0,007
2	A-O	100,545-86,470	14,075-	0.000
3	B-O	100,545-99,500	1,045-	0,812

* significant if sig value is ≤ 0.05

Table (9) shows that there are statistically significant differences for students’ marks in (optimism – pessimism) scale and due to blood groups for the sake of A+ group and there are no statistically significant differences for O+ and B+ due to contrast in their blood groups in terms of (optimism – pessimism) and fear scales. Results also showed that differences between degrees of male and female students in (optimism – pessimism) and fear scales due to contrast in blood groups showing that there is a difference towards male students as O+ was significant in optimism while A+ in (optimism – pessimism) and fear scales. This agrees with the study of Moussa: 2003, 50 in differences between genders due to blood groups showing differences in characteristics and also the study of (Lester: 1987, 267) which asserted the relation between blood groups with personal attributes and the O+ group is prevalent among individuals. A lot of studies such as (Kett: 2002, 4) asserted that anthropometric and psychological attributes have the greatest effect and blood affects neural system and hormones to play a great role in anthropometric and psychological attributes.

4. CONCLUSIONS

- 1- Sample of the study was characterized by average fear level for male and female students.
- 2- Some blood groups with average level of optimism and some other groups with pessimism.
- 3- The O+ blood group showed average fear level compared with A+ and B+ for female students.
- 4- The O+ & B+ blood groups showed optimism, while female students with A+ group showed pessimism.
- 5- The sample of the study of students showed average fear level according to blood groups less in level for B+, O+ and then A+ group.
- 6- The sample of the study of students showed optimism for B+, O+ and then A+ group showed pessimism.
- 7- The study showed significant differences for the sake of O+ group for female students in optimism and pessimism and significant differences for A+ group in terms of optimism – pessimism and fear levels.

5. RECOMMENDATIONS

- 1- The concern with identifying motivations of human behavior and studying psychological variables.
- 2- The concern with selections due to blood groups for male and female students of the Faculty of Physical Education.
- 3- Conducting researches tackling the relation between blood groups and other psychological variables related to intelligence and achievements for the athletes.

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