# Psychological fluency and its relation to psychological flow among students of Physical Education and Sports Sciences

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# ABSTRACT

The aim of this study was to identify the psychological fluency and psychological flow and the relationship between them among students of the fourth stage of the College of Physical Education and Sports Sciences at the University of Babylon. A cross sectional study was carried out and it was used a descriptive approach with survey and correlational methods. A total of 15 female students participated in the study. Psychological fluency scale and psychological flow scale were used as research instruments to identify the psychological fluency and psychological flow and the relationship between them. After processing the results statistically, we found that the fourth-stage students of the College of Physical Education and Sports Sciences enjoy a high level of psychological fluency and also a high level of psychological flow. Psychological fluency had a positive relationship were 0.428, 0.422, 0.235 and 0.766. In conclusion, the fourth-stage students of the College of Physical Education and Sports Sciences for the correlation relationships were 0.428, 0.422, 0.235 and 0.766. In conclusion, the fourth-stage students of the College of Physical fluency had a positive relationship with the psychological fluency had be psychological fluency had a positive relationship with the psychological fluency had be psychological fluency.

# **KEYWORDS**

Psychological fluency; Psychological flow; Female students

### **1. INTRODUCTION**

Psychological fluency is the best psychological mobilization or preparation for the athlete to achieve the best performance. In addition, this fluency occurs without a trace of tension in its various forms, especially those resulting from negative emotions such as fear, anxiety and boredom (Ratib, 1995).

Psychological flow is defined by Csikszentmihalyi, et al. (2005) as a state of the individual's subjectivity that occurs when he is fully integrated into the activity and his attention is focused with all his energies on the work he is doing (Al-Budairi, 2015).

The students of the College of Physical Education and Sports Sciences, by their enrollment in the college, strive for good physical fitness in terms of strength, speed, endurance, mobility flexibility, agility, kinetic ability, ability to balance and kinematic compatibility for the permanence of their efforts in this college, as well as the acquisition of theoretical information about sports and related sciences. There is no doubt about the psychological preparation. It is characterized by the synchronization of the psychological energy with physical energy at the highest level.

When students reach the stage of psychological fluency in the performance of academic requirements in the College of Physical Education and Sports Sciences, it is not easy because, according to our simple vision, it must combine many psychological factors, including psychological flow, which we believe there is a reciprocal relationship between it and psychological fluency, in order to give a good picture of how students are treated by what is required of them in the university.

All this, shows the importance of the current research in discovering the reality of psychological fluency and psychological flow among students of the fourth stage of the Faculty of Physical Education and Sports Sciences at the University of Babylon (since they are the most experienced among the students of the different stages) and not only that, but also the importance of the research extended to include the mutual relationship (which we believe) between psychological fluency and psychological flow and trying to know it to provide the necessary information in the future interaction with college students according to a better perspective. The current study aims to identify the psychological fluency and psychological flow and the relationship between them among students of the fourth stage of the College of Physical Education and Sport Sciences at the University of Babylon.

The research problem is reflected in the lack of information on both the psychological fluency and the psychological flow of the fourth stage students in the College of Physical Education and Sports Sciences at the University of Babylon, as well as the lack of knowledge of the relationship that may exist between the two variables, which we find has great importance in preparing students for what awaits them in terms of work and transcendence. Some of the failures that female graduate students may fall into in their future work.

The hypothesis was that there is a positive relationship between psychological fluency and psychological flow among students of the fourth stage of the College of Physical Education and Sports Sciences at the University of Babylon.

# 2. METHODS

### 2.1. Study design and participants

A cross-sectional study was carried out. The study community consisted of 27 students of the fourth stage of the College of Physical Education and Sports Sciences at the University of Babylon for 2020/2021. The sample consisted of 15 female students (55.55%). The study was conducted in the period between 14/1/2021 to 1/5/2021, in the classrooms of the College of Physical Education and Sports Sciences at the University of Babylon.

#### **2.2. Instruments**

#### 2.2.1. Psychological Fluency Scale

The researchers used the local psychological fluency scale created by Howaydah Ismail (Ibrahim, 2005). It is a scale that contains 4 domains. The field of enjoyment which contains 17 paragraphs, the area of avoiding anxiety, which contains 11 paragraphs, the focus area in performance, which contains 9 paragraphs and the area of high confidence which contains 5 paragraphs. Some of the paragraphs were positively worded (towards the field to which they belong) and others negatively worded (against the direction of the field). There are three response (highly agree, moderately agree, slightly agree) and that the positive paragraphs are scored as (1, 2, 3) and the negative paragraphs are scored as the. It has been taken into account not to explicitly write the scale name when applying it to the sample to ensure desirability.

### 2.2.2. Psychological flow scale

We reviewed the literature and previous studies and after examining the relevant measures, the psychological flow scale prepared by Amal Abdul Sami Meiji in 2010 (Meliji, 2010) was approved which contains (56) paragraphs where the response alternatives are five (Always - Often - Sometimes - Rarely - Absolutely) and grades are given to it (5 - 4 - 3 - 2 - 1).

### 2.3. Field research procedures

#### 2.3.1. Exploratory experience

It was conducted to avoid errors in applying the two scales (research data), as we applied the two scales to 10 students of the fourth stage in the College of Physical Education and Sports Sciences of the University of Babylon, to ensure the clarity of the scale instructions and paragraphs for the players and to identify the conditions for applying the scale and what may accompany obstacles or difficulties before the start of the preliminary test. This was done on 24/1/2021, in addition to finding the scientific conditions for the two mentioned scales.

#### 2.3.2. Scientific conditions

*Truthfulness:* In order to achieve the validity of the two scales (psychological fluency) and (psychological flow), we presented the two forms containing the scales as mentioned earlier to several experts and specialists in sports psychology and all of them agreed to their validity for use in students of the College of Physical Education and Sports Sciences.

*Stability:* Consistency is one of the essential measurement characteristics of psychological measures, and reliability is the degree of consistency or homogeneity between the results of two measures in assessing a characteristic or behaviour (Al-Nabhan, 2004). The reliability of the two scales was verified by testing and repetition. The degree of correlation (consistency) between the two applications of the two measures of psychological fluency and psychological flow were (0.87) and (0.86), respectively, which are generally acceptable degrees of reliability.

*Objectivity:* It was verified by applying the exploratory experiment as no question or inquiry has been made about any of the phrases and in the psychological measures, the explicit statements that leave no room for confusion among the respondents where "the test is objective if its questions are specific and its answers are specific and so that the question has only one answer. Leaves room for ambiguity (Khuraibet, 1987).

### 2.4. Basic experience

We conducted our main experiment which is applying the scale to a sample of 15 students, randomly selected, during the period between (7-10/3/2021) and under the same conditions and instructions. After completing the implementation of the preliminary experiment, the two researchers

collected the data from all members of the research sample and arranged them in tables in preparation for analysis and discussion.

### **2.5. Statistical Analysis**

The Statistical Package for the Social Sciences (SPSS version 21.0) was used for data analysis. We have used the descriptive approach with its survey style and correlative relationships, as it is appropriate to the nature of this study. The Pearson correlation was used to identify the nature of the correlation between the two variables of psychological fluency (with its four domains) and psychological flow.

#### **3. RESULTS AND DISCUSSION**

First, we present the psychological fluency and psychological flow results of the students. After the questionnaires of the two scales (psychological fluency) and (psychological flow) were distributed to the students, we corrected the sample responses on the two scales to indicate the results in Table 1.

Statistical methods	Do	omains of psycholo	Psychological flow		
	Enjoy	Get away from	Focus on	High	
		anxiety	performance	confidence	
Arithmetic	36.80	21.36	18.49	8.98	242.81
mean					
Standard	2.38	2.32	1.14	1.09	6.35
deviation					

Through Table 1 we find that the values of the fields of psychological fluency are essential, and regarding to the field of enjoyment, it obtained an arithmetic mean of 36.80 degrees, which is a mean value if we consider the value of the theoretical mean of the field which is 34, ranging from the highest and lowest possible degree that the subject should take in this field between 51-17, and the theoretical mean value was obtained from the result of summing the grades of the grading scale 3, 2, 1 after dividing it by 3 and multiplying it by 17 the number of paragraphs of the field (Abboud, 2004). By reviewing the definition of the field of enjoyment (Ibrahim, 2005), we can indicate the middle state of the players' feeling for the challenge of the performance tasks and their requirements for their personal abilities, which makes it in a middle state also a feeling of enjoyment, satisfaction and enthusiasm for trying to make the maximum effort and maximum performance possible, but the

lack of the students' achievement of a high degree in this field can be explained by the collision of some psychological conditions that they coexist. On the one hand, you may see their insistence on challenging performance requirements, and on the other hand we find the lack of enjoyment, whose paragraphs (40) and alternatives to the response (5) and the lowest degree are 40, and the theoretical mean that is calculated in the same way with the areas of demand the psychological well-being has reached 120 degrees. We know that the degree indicated to the female students is a medium value, which confirms the students' appreciation for their advantages in dealing with the surroundings with appropriate quality.

Next, Table 2 presents the relationship between psychological fluency and psychological flow.

Domains of psychological fluency	Psychological flow	The calculated value (t)	The value of (t) Tabulated	P value
Enjoy	0.482	4.602	2	value
				< 0.05
Get away from anxiety	0.422	3.894	2	<0.05
Focus on performance	0.235	2.022	2	
High confidence	0.766	9.969	2	< 0.05
ingn connuchee	0.700	2.202	-	< 0.05

**Table 2.** The correlation between the two variables of psychological fluency (in their four domains) and the psychological flow.

From Table 2, it is evident that all areas of psychological fluency have absolute correlation with the psychological flow of the fourth stage students of the College of Physical Education and Sports Sciences as the calculated scores for the correlation relationships were 0.482, 0.422, 0.235 and 0.766. For the domains of psychological fluency, respectively, with the psychological flow, and when these values are entered with the equation (T) the meaningful correlation, the results indicated in front of each of them and as in the table above, they are all more remarkable than the tabulated score (T) at the degree 70 and below the level of significance (0.05), which is 2. It is interesting to note the strong relationship that the field of high confidence in psychological fluency affected with the psychological flow of female students, which indicates the correlation of the two concepts in clarifying the characteristics of students in the extent of their awareness of their natural abilities and the mechanism of using these abilities in difficult situations to try to reach the best possible level of performance.

There are also high degrees of correlation between the field of enjoyment and psychological flow. Yen's feeling of challenging performance requirements and reaching self-satisfaction is closely related to psychological flow and its psychological fluency performs different motor skills. Also, we find the same situation when interpreting the relationship between anxiety avoidance and psychological flow.

### 4. CONCLUSIONS

The fourth-stage students of the College of Physical Education and Sports Sciences of the University of Babylon enjoy a high level of psychological fluency and psychological flow. Psychological fluency has a positive relationship with the psychological flow of fourth stage students of the College of Physical Education and Sports Sciences at the University of Babylon, with a high level of psychological fluency.

# **5. RECOMMENDATIONS**

In light of the results of the study, the authors recommend the following:

- Increasing the interest of teachers and officials of the College of Physical Education and Sports Sciences in enhancing the psychological fluency of female students, as it is directly related to their psychological flow.
- The necessity of dealing with female students according to psychological principles is recognized through psychological measures to improve their handling of the college's practical and theoretical teaching requirements.
- We also suggest conducting similar research at different educational levels with the same or different psychological variables that support proper psychological interaction and preparation to keep up with what they are required to perform in college.

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# AUTHOR CONTRIBUTIONS

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# **CONFLICTS OF INTEREST**

The authors declare no conflict of interest.

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