BUILDING A PSYCHOLOGICAL FLOW SCALE IN THE RHYTHMIC GYMNASTICS LESSON FOR THIRD-STAGE STUDENTS OF THE COLLEGE OF PHYSICAL EDUCATION AND SCIENCES

[1]Dr. Nuha Mohsin Dhahi, [2]Dr.Mohammed Hamzah Shuhaib

Abstract

In this study, the two researchers try to identify the degree of psychological flow among third-stage students in the College of Physical Education and Sports Sciences / University of Baghdad, by constructing a psychometric flow meter for third-stage students in the College of Physical Education and Sports Sciences / University of Baghdad, and the research sample reached 123 female students They represent 100% of the research community, and after conducting the scientific foundations for building the scale, the two researchers reached the final version of the psychometric flow scale with 21 items with four axes.

Keywords: psychological flow, third-stage students, Physical Education

I.   INTRODUCTION

The first start in the study of needs was the attempts of Abraham Maslow, who provided a model for classifying needs according toClassification of Maslow's Hierarchy The first historical roots of the emergence of studies on flow were back to the 1960s

In the past, the scientist Mihaly and his colleagues began to study psychological flow, after they studied the condition of artists and painters . And how they are integrated and absorbed when they do their work, and through that, it has become research and studies. More flow was prevalent in the eighties and nineties (2012-25, csikszentmihaly)

Psychologists began with early indications to point out the need for careful analysis of the positive aspects of personality.This trend led to the disclosure of many positive thoughts after the negative thoughts were controlled. That generate negative feelings and emotions that lead to negative behaviors or attitudes, that is, they

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[1]*University of Baghdad - College of Physical Education and Sports Sciences.*
[1]*University of Baghdad - College of Physical Education and Sports Sciences.*

affect the formation of behavior.The student, his social relationship, his psychological and physical health, and the pessimist expects evil, despair and failure and looks. Life has a negative outlook, especially since the changes, events, pressures and insecurity our country has gone through may be due to a possibilityBad effects on university youth. (Hegazy, 2012: 12-11)

he importance of addressing positive concepts within the university student system, and spreading this science culture within the university communityBy studying on his concepts, whether in seminars, conferences, research and lectures, so the psychological flow is one. The concepts of positive psychology, which is an internal psychological state that makes the learner preoccupied and absorbed by the activity

A sense of success in dealing with such activities, which leads to the learner's absorption completely. His personality systems in accomplishing a certain task within the period of time (Al-Mousawi and Shutb, 2015, p.52). Psychological flow is one of the modern strategies in positive psychology, as it proceeds according to the principle of implantation. Self-efficacy, hope and optimism, as these techniques are used to reduce anxiety and the strength of personality is developed fromWithin these aspects (Al-Fangary, 2008: 55)

Psychological flow is also one of the modern concepts in educational and psychological sciences, as it was the beginning of the search for behavior. Flooding at the end of the 1980s by scholar Mihaly in the twentieth century, when he watched people perform. Their work and activities are in a state of focus and goal-setting in themselves as artists, mountain climbers and painters. And others, as if a state of pleasure and pleasure was observed on the individuals who performed these acts(Friend,314: 2009)

Flow is one of the branches of positive psychology, as the latter is concerned with the scientific study of human happiness, as well asBy studying the subjective personality such as personal well-being, contentment, contentment, flow and happiness. (Abu Halwa, 2013: 5.)In other words, flow "is a state that, when reaching the height of the challenge, allows a person to go beyond himself and describe it."By saying, "I am so absorbed in what I do that I do not see myself separated from my work" (McNeill, 2009: 54.)

Also, the state of flow represents the maximum degree in the enhancement of emotions that serve performance, learning, emotions, and state. The flow is not just flowing emotions going in a specific direction, but positive emotions filled with energy to organize their forces. With what is happening in the mortgage act, if a person is possessed of boredom or tension and anxiety, this prevents the flow of feelings,And the flow of feelings is nothing but an experience that almost everyone goes through from time to time, especially when this experience reaches. Its climax, or beyond its limits preceding it, the distinctive relationship of flow of feelings is the feeling of joy automatic or even orgasm to the maximum (Goleman 1995: 90)

The internal psychological state that makes the learner feel alone and fully focused with what he is doing and motivated with vitality. Towards activities with a general sense of success in handling these activities and this is called psychological flow. This state is related to the optimal learning state, which leads the learner to become absorbed in his entire personal system. A task without missing a destination or a path with a time or time projection from the calculations, meaning that the activities of whom remain. It lives with this valid and

extended state until the task is completed, no matter how long the time period.Since psychological flow is a recent topic in physical education and sports science, it has not been extensively studied

In addition to the absence of a special scale to measure this psychological trait, the researchers decided to study this topic. And the answer to the following question: What is the degree of psychological flow among third-year students in the College of Physical Education?

And Sport Sciences / University of Baghdad, and through the research problem, the two researchers sought constructive through the current research

Psychological flow scale for third-year students in the College of Physical Education and Sports Sciences / University of Baghdad.

II. PROCEDURES AND TOOLS

The researcher used the descriptive approach in the survey method and the relational relationships for its relevance to the nature of the research.

A community of research students of the third cycle for the academic year 2019-2020 at the College of Physical Education and SciencesSports / University of Baghdad / Al-Jadriya, the number of (123) students, percentage of (100%).

Search tools:

The researcher built the psychological flow scale for students of Physical Education and Sports Sciences through the following steps

First, identify the fields of scale:

After reviewing the scientific literature and previous studies, the two researchers suggested four areas (balance between:Challenge and skill, clear goals, clear feedback and task focus (work, activity, study) and presented it to a group of experts and specialists in the field of psychology, tests and measurement, who numbered in total (11) experts, and the experts expressed their agreement on the proposed fields and their definitions.

Psychological flow is ready to put into paragraphs that fit the concept of each of the scale areas, and Table (1) shows that.

Table 1. The agreement of experts and specialists on the fields of measurement

	Value of indication	The value of $(KA)^2$ Calculated	Number of experts Inconsistent	Number of experts Agreed	Candidate areas	No.
Indic ation	0.000	11	0	11	Balance between challenge and	1

					skill	
moral	0.007	7.364	1	10	Clear goals	2
moral	0.035	4.455	2	9	Clear feedback	3
moral	0.000	11	0	11	Focus on the task Activity, Study,the work	4

Second, preparing the scale items

After identifying the (4) psychological flowmeter domains, the researchers formulated paragraphs the scale in its initial form, which amounted to (30) items, were distributed over the scale fields.The balance between challenge and skill (on) 7 paragraphs, and the area of (clear objectives) contained (on) 7 items .The field (clear feedback) on (9) paragraphs, and the field (focus on the task (work, activity, study)) on (7) paragraphs, which were presented to experts and specialists, and the experts expressed their agreement on the paragraphs that were drawn up according to the concept of each scale area.

Third Correct the scale:

Alternatively, the answer was given (always 2) degrees for alternatives to the three-scale alternative, as (3) scores were given, and one score for alternative answer) Start the answer (sometimes 1,) and).

Fourth: The main experiment

After reaching the initial formula for the psychometric flow meter, the two researchers, with the help of the assistant work team, applied the scale is based on the building sample, which is (123) female students of the third stage / College of Physical Education and Sports Sciences / University of Baghdad from Monday 24/2/2020 until Wednesday, 2/26/2020, and after completing the main experiment, the researchers conducted the classroom electronically and on the Calcroom platform arranging the scale forms, correcting them, and recording the results by dragging them onto the Excel program for analysis

Prelude . Statistically, the descriptive characteristics of the sample response scores, which are (123) students, have been found the members of the sample are distributed naturally in the scale, and Table (2) shows that.

Table 2.Descriptive characteristics of the scale

Scale	Properties	No.
74.2114	Arithmetic mean	1
7.17035	standard deviation	2
0.434	Twisting	3

| 56.00 | Min Degree | 4 |
| 90.00 | Max Degree | 5 |

Fifth: The scientific parameters of the scale:

❖ Outward honesty: It is one of the most important types of honesty in psychological measurements and it indicates the extent of the relevance of the paragraph to the phenomenon

The apparent validity of the scale was achieved when the scale in its initial form was presented to a group. To judge the validity of its terms in measuring learned disability with (11) experts

❖ Distinguishing power: It was extracted by using the T-test (test.t) to indicate the differences of the media.The computation of two independent samples between the upper and lower groups. The researcher adopted the paragraphs whose significance is less than the approved level of significance (05.0) and the degree of freedom (64), and Table (3) shows that.

Table 3.The discriminatory power of each item of the scale

RESULT	Value of indication	Value (t)	Upper group		Lower group		NO.
			A	S	A	S	
Moral	0.000	34.000-	0.00000	3.0000	0.17408	1.9697	1
Moral	0.000	17.333-	0.00000	3.0000	0.39167	1.8182	2
Moral	0.000	17.333-	0.00000	3.0000	0.39167	1.8182	3
Moral	0.000	16.400-	0.00000	3.0000	0.43519	1.7576	4
Moral	0.000	16.400-	0.00000	3.0000	0.43519	1.7576	5
Moral	0.000	16.166-	0.00000	3.0000	0.45227	1.7273	6
Moral	0.000	19.433-	0.00000	3.0000	0.33143	1.8788	7
Moral	0.000	18.167-	0.00000	3.0000	0.36411	1.8485	8
Moral	0.000	15.019-	0.00000	3.0000	0.39409	1.9697	9

Moral	0.000	25.145-	0.00000	3.0000	0.24231	1.9394	10
Moral	0.000	16.773-	0.00000	3.0000	0.41515	1.7879	11
Moral	0.000	34.000-	0.00000	3.0000	0.17408	1.9697	12
Moral	0.000	18.167-	0.00000	3.0000	0.36411	1.8485	13
Moral	0.000	16.166-	0.00000	3.0000	0.45227	1.7273	14
Moral	0.000	16.807-	0.00000	3.0000	0.50752	1.5152	15
Moral	0.000	20.000-	0.00000	3.0000	0.47871	1.3333	16
Moral	0.000	16.166-	.45227	2.2727	0.00000	1.0000	17
Moral	0.000	16.036-	0.00000	3.0000	0.48850	1.6364	18
Moral	0.000	21.466-	0.00000	3.0000	0.29194	1.9091	19
Moral	0.000	14.215-	0.00000	3.0000	0.42862	1.9394	20
Moral	0.000	25.145-	0.00000	3.0000	0.24231	1.9394	21
Moral	0.000	6.266-	0.00000	3.0000	0.55562	2.3939	22

❖ Internal consistency coefficient: The two researchers used two types of internal consistency to achieve this:

The relationship of the paragraph score to the total score of the scale: It is to find a relationship between each paragraph and the total score of the scale.

For all members of the sample, the purpose of this procedure is to correlate the score of the paragraph with the total score of the current scale, as the item . It represents the concept or feature to be measured, and Table (4) shows that.

Table 4. Correlation coefficient between item score and overall scale score

Result	Value of indicatoion	Simple correlation coefficient	Item No.	Result	Value of indication	Simple correlation coefficient	Item No.
Not moral	0.515	0.059	16	Moral	0.000	0.485[**]	1
Not moral	0.327	-0.089	17	Moral	0.000	0.488[**]	2

Not moral	0.594	0.049	18	Moral	0.000	0.494**	3
Moral	0.000	0.464**	19	Moral	0.000	0.521**	4
Moral	0.000	0.381**	20	Moral	0.000	0.473**	5
Moral	0.000	0.370**	21	Moral	0.000	0.429**	6
Moral	0.000	0.593**	22	Moral	0.000	0.609**	7
Moral	0.000	0.474**	23	Moral	0.000	0.543**	8
Moral	0.000	0.536**	24	Moral	0.000	0.564**	9
Moral	0.000	0.493**	25	Moral	0.000	0.574**	10
Moral	0.000	0.385**	26	Moral	0.000	0.493**	11
Moral	0.000	0.412**	27	Moral	0.000	0.598**	12
Moral	0.000	0.450**	28	Moral	0.000	0.600**	13
Moral	0.000	0.472**	29	Moral	0.000	0.541**	14
Moral	0.000	0.466**	30	Not moral	0.754	0.029	15

We find that a statistical function except for the paragraphs (18, 17, 16, 15), it is not a function at the level of the scale.

Significance (05.0) therefore it was rejected, so that the number of paragraphs is (26) items. And the relationship of the paragraph score to the total score of the field: it is one of the necessary indicators that show the extent of the scale's validity in measuring the characteristic to be measured by the paragraph that belongs to the domain that in turn belongs to the scale, and Table (5)

It shows ..

Table 5. Correlation coefficient between item score and total field score

Result	Value of indication	Simple correlation coefficient	Scope	Result	Value of indication	Simple correlation coefficient	Scope
Moral	0.000	0.614**	Clear	Moral	0.000	0.638**	Balance

Moral	0.000	0.575**	feedback	Moral	0.000	0.686**	between challenge and skill
Moral	0.000	0.598**		Moral	0.000	0.637**	
Moral	0.000	0.633**		Moral	0.000	0.708**	
Moral	0.000	0.621**		Moral	0.000	0.590**	
Moral	0.000	0.604**	Focus on the task (work, activity, study)	Moral	0.000	0.520**	
Moral	0.000	0.576**		Moral	0.000	0.601**	
Moral	0.000	0.620**		Moral	0.000	0.662**	Clear goals
Moral	0.000	0.650**		Moral	0.000	0.679**	
Moral	0.000	0.676**		Moral	0.000	0.576**	
Moral	0.000	0.613**		Moral	0.000	0.562**	
Moral	0.000	0.467**		Moral	0.000	0.685**	
				Moral	0.000	0.742**	
				Moral	0.000	0.717**	

❖ Stability: The test or scale is distinguished by the stability of the necessary and necessary points, as it "indicates the extent of accuracy or

The proficiency or consistency with which the test measures the phenomenon for which it was developed (Muhammad Nasreddin, 2006:

(P. 98), and to verify the stability of the psychological flow meter under study, the researchers used the following methods:

Half-segmentation method: The researcher divided the paragraphs of the scale into two halves, the first half and the second half, and were extracted the correlation coefficient between the sum of the scores of the two halves according to the Pearson method, and it was found that its value is (731.0), and that the coefficient the correlation here indicates the stability of the half scale and then the complete stability according to the Spearman-Braun correction equationStability to be total stability (741.0).

And most of them the Alpha Cronbach method: D is one of the most common stability parametersFakronbach is an internal homogeneity of the scale the relevance of Cronbach to the consistency of the individual's performance from one paragraph to the next and the strength of the psychological measures.

Correlations between paragraphs of the scale and that it provides us with a good estimate of stability (Nunnaly, 1978: p. 250) and Table (6)The reliability coefficient is indicated by the Alpha Cronbach half-segmentation of the scale

Table 6. Reliability coefficients for scale

Alpha Cronbach	Halftone hash	
	Stability coefficient	Stability of half the test
0.879	0.741	0.731

Factor analysis: it is also called Global honesty and it used to identify the validity of the paragraphs and the validity of the test or scale in measuring the behavioral dimension through recognition. The extent to which its paragraphs are related to each other and reduce its variables to a simpler and lesser form, which are the factors.It aims to study the phenomena and extract the factors that were affected by them through data analysisStatisticallyStyle. Multiple categories were related to each other to different degrees in the form of independent classifications based on the qualitative foundations of classification (AbdMuttalib, 2016: p. 81.)

❖ View the factor analysis of the learned disability scale:

The sample (0.000 significance, at a level of (0.791) Kaiser-Meyer-Olkin) value amounted to proof thatSuitable for conducting a factor analysis, and the (26) items of the scale were entered for the global analysis to identify the degrees of the correlation coefficients between the paragraphs and through examining the interrelations matrix,

The inter-correlations, and after subjecting the raw scores to the construction sample, it is revealed that (8) factors are accepted because the value of the underlying root

For each factor greater than (1), their in-kind values ranged between (107.2) and (345.0), while the factor values ranged between

(689.25) and (210.4). These factors explained the value of (758.65)% of the values of the combined variance, which represents

(100%), and as shown in Table (7)

Table 7.

Display total contrast									
Values after rotation			Values before rotation			Primary eigenvalues			
Cumulative percentage%	Importance of factors%	Specific values	Cumulative percentage%	Importance of factors%	Specific values	Cumulative percentage%	Importance of factors%	Specific values	factors
12.466	12.466	1.023	25.689	25.689	2.107	25.689	25.689	2.107	1
23.516	11.049	0.906	34.101	8.412	0.690	34.101	8.412	.690	2
31.981	8.465	0.694	40.736	6.635	0.544	40.736	6.635	.544	3
39.334	7.354	0.603	46.637	5.902	0.484	46.637	5.902	.484	4
45.649	6.314	0.518	52.014	5.377	0.441	52.014	5.377	.441	5
52.596	6.947	0.570	57.265	5.250	0.431	57.265	5.250	.431	6
58.756	6.161	0.505	61.548	4.283	0.351	61.548	4.283	.351	7
65.758	7.002	0.574	65.758	4.210	0.345	65.758	4.210	.345	8
						69.403	3.645	.299	9
						72.776	3.373	.277	10
						75.747	2.971	.244	11
						78.596	2.849	.234	12
						81.290	2.694	.221	13
						83.695	2.405	.197	14
						85.871	2.177	.179	15
						87.931	2.060	.169	16
						89.809	1.877	.154	17

						91.440	1.632	.134	**18**
						92.994	1.554	.127	**19**
						94.452	1.457	.120	**20**
						95.813	1.362	.112	**21**
						96.969	1.156	.095	**22**
						97.960	.991	.081	**23**
						98.877	.917	.075	**24**
						99.529	.653	.054	**25**
						100.000	.471	.039	**26**

❖ Presentation of the scale factors before the rotation: The two researchers concluded (3) primary factors, as it is not possible to explain

These factors are only after being recycled, and that these results are preliminary direct results, and that the global analysis is not satisfied with these

The step is because it does not fulfill the simple combination of factors that help explain it (Faraj, 1980: p. 128).

❖display scale factors after rotation: the process of rotating the factors leads to removing the ambiguity that accompanies it . Initial analysis to arrive at a simpler form of factors, and the aim of rotating the factors is to obtainSignificant factors do not change from one analysis to another, and the process of rotating the factors is an essential step in arriving at the factors

The product is simple and regular (Abdel-Majeed, 2001: p. 36).

The researchers used orthogonal rotation in the manner of (Varimax) by Henry Kaiser (Kaiser), thenThe researchers identified the factors that could be explained by relying on the degree of saturation of the paragraphs within their factors and a number . Items in each factor as the degree of saturation (40.0) and more was adopted and the acceptance of the factor in which it was saturated (3) Items .

Therefore, more and more, according to that, (1) only one worker was accepted for the scientific conditions set forth by himAccording to two accredited researchers on the factor matrix after rotating in the interpretation of the results and after arranging the saturations of their variables on the factors in descending order

❖ Interpreting the factors of the learned disability scale and naming them: according to the terms of acceptance of factors, one factor and one of the factors are explained

Extracted after orthogonal rotation as follows:

Interpretation of the first factor: Table (8) shows the saturation of the vertebrae in the first factor, as the number reached

(Sorted in ascending order.)

The saturated paragraphs on this factor (14) paragraphs constitute (66.46)% of the total number of paragraphs that have been completed

Its introduction to the global analysis and its saturations ranged between (422.0 and 664.0), as (7) paragraphs of the first area were saturated,

(7) paragraphs from the second domain are saturated, (3) paragraphs from the third domain are saturated, and (4) paragraphs from We notice that most of the first and second paragraphs are saturated. The fourth field, in this factor, are the sectors of the field

Table 8. Items numbers and their sequence for the first factor are arranged in ascending order according to degrees of saturation

Saturation	Items	Item No.	No.
0.422	I know very well the goals that your rhythmic gymnastics school aims to achieve during the lesson	6	1
0.475	I have a strong sense of implementing your rhythmic gymnastics skills	5	2
0.477	.I feel proficient in implementing your rhythmic gymnastics skills	3	3
0.481	.It is easy for me to absorb the skills and demonstrate them to my colleagues	19	4
0.482	.I can overcome obstacles in the lesson by relying on my own capabilities	15	5
0.488	.If I fail once, I will succeed next time	25	6
0.493	.My behavior with my colleagues is wise and understanding	21	7
0.497	I realize that my abilities match the difficulties of your rhythmic gymnastics skills in the lesson	2	8
0.511	Have mental steadiness in what happens during the lesson, without making any .effort	11	9

0.521	I feel the balance between my skills and your rhythmic gymnastics skills	4	10
0.535	.I work and hope fills me in the hidden things	26	11
0.540	I have more than one way to implement skills with my own hands to make my life interesting and joyful.	20	12
0.541	I defy the odds, and I believe my abilities enable me to implement your rhythmic gymnastics skills	1	13
0.596	.I really realize, clearly, that I'm doing good skills	8	14
0.602	.I feel I can master the skills I perform	14	15
0.606	.I realize that I'm doing good skills, and how I accomplish them	10	16
0.608	.I am well aware of how to perform the tasks and skills required of me	9	17
0.619	.I control what I do to implement the skill	13	18
0.630	.I can succeed with what I failed previously	18	19
0.648	.I clearly set my goals in the lesson	7	20
0.664	.I have total focus as I perform the skills during the lesson	12	21

The rest of the factors were omitted in order to satisfy less than three paragraphs in each factor, and this is in violation of the conditions for accepting the factors

Moreover, through the process of interpreting the results of the psychological flow scale factor analysis, the researcher reached (21) items

For the final scale, which represents (70)% of the total number of items entered for the global analysis

Table (9) shows that.

Table 9. The scale's item numbers and their sequence for each factor are arranged in ascending order according to the degrees of saturation

Eighth factor		Seventh factor		Sixth factor		Fifth factor		Fourth factor		Third factor		Second factor		First factor		No.
satur ation	Item	satur ation	Item	satur ation	Item	satur ation	Item	satur ation	Item	satur ation	Item	satur ation	Item	satur ation	Item	

0.514	24			0.430	1	0.546	23	0.465	3	0.421	2	0.518	4	0.422	6	1
				0.534	16			0.459	26	0.527	17	0.473	25	0.475	5	2
				0.471	11									0.477	3	3
														0.481	19	4
														0.482	15	5
														0.488	25	6
														0.493	21	7
														0.497	2	8
														0.511	11	9
														0.521	4	10
														0.535	26	11
														0.540	20	12
														0.541	1	13
														0.596	8	14
														0.602	14	15
														0.606	10	16
														0.608	9	17
														0.619	13	1

																8
														0.630	18	19
														0.648	7	20
														0.664	12	21

❖The final image of the psychometric flow meter: represents the psychological flow meter by only one factor, including

The scale in the final form of (21) paragraphs as in Appendix (3), and four domains, as the field of (balance between

Challenge and skill (on) 7 paragraphs, and the area of) clear objectives contained (on) 7 paragraphs, and the field of (nutrition

A clear review of (3) items , and the area of (focus on the task) work, activity, study ((on) 4)

Items .

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