

## THE EFFECT OF TRANSFERRING POSITIVE AND NEGATIVE ENERGY IN EVALUATING THE PERFORMANCE OF SOME KINETIC SKILLS IN RHYTHMIC GYMNASTICS

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### Abstract

The purpose of this paper is to identifying the effect of positive and negative energy transfer among female students on the kinetic performance of some kinetic skills in rhythmic gymnastics. The researchers used the experimental approach due to its suitability to the nature of the research; the research sample consisted of second-stage female students in the College of Physical Education and Sports Sciences, divided into four different sections, in order to exclude the chance factor. The researchers chose five female students from each division as a sample to measure kinetic skills, and five other female students as factors to transfer the effect of positive psychological energy to transfer the effect of negative psychological energy. The results showed a clear improvement in skillful performance after the positive energy transfer procedures, with no improvement in performance with the use of negative energy transfer procedures.

**Keywords:** Energy. Positive. Negative. Arousal. Skillful performance. Rhythmic.

### Introduction

Energy is the main pillar of life, starting from the smallest particle to the largest galaxies. There is no doubt that energy is the main engine of existence, and without energy we turn into stagnation. On the level of human behavior, energy is the engine of behavior, and gives it vitality. It is the basis of motivation, and it may be positive when it is associated with feelings of excitement and happiness, and it may be negative when it is associated with fear and anxiety (Bahi and Abdelkader, 2004).

Although the subject of human energy is still in the process of research and investigation by human psychologists, but now laboratory trials have reached the threshold of designating it as an evidence-based therapy, and clinical results indicate that human energy psychology shows promise (Feinstein, 2008). Psychologists often deal with the scientific term (psychological energy) synonymously with other terms such as activity, motivation, and in the sports field, the use of the term psychological energy corresponds to physical energy and is complementary to it. Evidence often indicates in training and competitions that despite the availability of physical capabilities However, the need for psychological energy is inevitable, as mobilizing the player psychologically in conjunction with physical, skillful and tactical mobilization makes the training process complete, and this positive activation of energy is intended to improve the processes of perception, perception, attention, remembering, thinking,

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decision-making, and others. We add to that what I mentioned (Alwan, 2017) that positive activation is "Acquiring happiness, joy, pleasure, optimism and enthusiasm, and confronting each of the pressure, tension and obstructing anxiety in order to reach the best emotional state".

Through the work of the researchers in the field teaching, they noticed that many students, especially the female students, are affected during the practical and theoretical lessons negatively and positively by the phenomenon of the transfer of activity from one of them to the other, as the researchers noticed that sometimes some behaviors result from some requests, whether from a positive side or from On the negative side, here the researchers decided to study this case in the field to find out its effects due to its adoption as a means in the educational process.

Many researchers studied the subject of psychological energy in a study by the researcher (Al-Zubaidi, 2016), which used the descriptive approach by designing correlational relationships and using the modified psychological energy scale, which was applied to (72) handball players, and the results showed a correlation between the level of psychological energy and the skillful self-concept. As for the study (Abdul Rahman, 2010), in which the researcher used the descriptive method, it was conducted on the first-class teams and showed that there is no relationship between the mobilization of psychological energy and the skill of defending the field. And the study (Al-Bashtawy, 2020) the differences in psychological energy between the types of players, as the researcher used the descriptive survey method, on a random sample of (225) players, and the results showed distinguishing four patterns: high motivation to achieve success with high fear of failure, high motivation to achieve success with fear low failure motivation, low motivation to achieve success with high fear of failure, low motivation to achieve success with low fear of failure, the researcher used (Ali, 2010) the descriptive approach was conducted on a sample of (15) players from the University of Mosul handball team. The results showed a positive and significant correlation between the psychological energy tests and the basic handball skills test. As for the study (Ghazi, 2007), the researcher used the experimental method on a sample of (16) young handball players, and the results showed the effectiveness of special exercises in mobilizing the psychological energy of the research sample.

### Research Objective

- Identifying the impact of positive and negative energy transfer

among female students on the kinetic performance of some kinetic skills in rhythmic gymnastics.

### Research Methodology and Field Procedures

#### Research methodology

The researchers used the experimental approach due to its suitability to the nature of the research

#### Community and sample research

The research sample consisted of second-stage female students in the College of Physical Education and Sports Sciences, divided into four different sections, in order to exclude the chance factor. The researchers chose five female students from each division as a sample to measure kinetic skills, and five other female students as factors to transfer the effect of positive psychological energy to transfer the effect of negative psychological energy as shows in the table 1 (Table 1).

For the purpose of completing the study in an optimal manner, the selection of the first five female students was based on perseverance, and they were the most homogeneous female students with each other in the variables of age (average age 19.8 years) ( $\pm$  0.985), average height (159.4) ( $\pm$  2.412), and average mass (60.412). ( $\pm$  3.021), as for the five female students who played

**Table 1:** Shows the Community and sample research.

Group	Pre-skill measurement	independent variable	Post-skill measurement
Division 1 (five female students)	Yes	Transfer the effect of negative energy	Yes
Division 2 (five female students)	Yes	Transferring the effect of positive energy	Yes
Division 3 (five female students)	Yes	Transferring the effect of positive energy	Yes
Division 4 (five female students)	Yes	Transfer the effect of negative energy	Yes

the role of carriers of positive energy, the researchers also trained the female students who were allocated for the purpose of transmitting the impact of positive energy and transferring the effect of negative energy. According to agreed-upon behaviors, for example, the female students, carriers of the effect of negative energy, were trained to play the role of the lazy and complaining, while performing behaviors such as changing the straightness of the rows, continuous exit from the jogging queue in the warm-up, and not performing all the warm-up repetitions. They were also trained to talk continuously in a tired and shabby manner, while choosing clothes of inconsistent colors and inappropriate for movements. Intentionally falling and not completing the performance. As for the students, who will play the role of carriers of positive energy, they have been trained in behaviors that spread activity, such as rapid response to instructions, frequent expressions of encouragement and motivation, while choosing clothes that are consistent and suitable for movement easily.

**Research Tests**

The two researchers selected a set of free skills, which are within the academic curriculum followed in the College of Physical Education and Sports Sciences: the front waltz, the side waltz, the step jump (bending extension), the step jump (extension bending), the cat jump, and the scissor jump. In order to provide the internal integrity of the research, especially the maturity factor that affects the results when the duration of the experiment is a long period of time, so the resulting changes in the dependent variable may be due to the effect of the long period of time and maturity that occurred to the sample members and not because of the experimental treatment of the independent variable, so the researchers did The experiment was conducted at the end of the semester, as all the skills had met the time period required for learning, and the measurement was carried out in the other two weeks, as the first week was devoted to measuring performance after the selected students performed positive energy behaviors on Division 1 and 3, and the second week was devoted to measuring performance after The selection students carried out negative energy behaviors on Division 1 and 3. Thus, we ensured that the results were not affected by the precedence of the type of effect, and this was done during the warm-up period and for a period of half an hour of evaluation. For the purpose of performance evaluation, the researchers

selected a committee of arbitrators of female teachers working in the field of rhythmic gymnastics, to give evaluation scores for each skill and for each group separately through direct evaluation during the performance, and then evaluate the performance directly after the procedures for transferring the impact of positive and negative energy, and the final score is extracted By deleting the highest and lowest score and finding the middle average of the remaining two scores, then it is combined with the score of the head of the arbitrators and divided by two to obtain the final score, noting that the highest score for each skill is (10).

**Results and Discussion**

**Results**

For the purpose of finding the results of the research, the researchers used the SPSS statistical bag, as the arithmetic mean, standard deviation, and the value of the differences between the pre and post tests were used through the t-test for related samples. In addition, the t-test was created for independent samples between the first, third, second, and fourth groups and the results were according to the following tables (Tables 2-5):

**Discussion**

From the above table, we note that the values of the differences between the pre-test and the post-test for the two groups with which the researchers used the effect of negative energy transfer did not achieve statistically significant differences, since the observation of the values of significance Sig. We find that they are all greater than the significance level of (0.05) and below the degree of freedom (4), which indicates the randomness of the differences, that is, there was no difference between the assessment of the skill performance scores of the research sample for the first and third groups in the pre and post-test. As for the second and fourth groups, with which the researchers used the effect of positive energy transfer, the results showed that the values of significance Sig. It was below the significance level of (0.05) and below the degree of freedom (4). This indicates that there are significant differences between the skillful performance before and after the application of transferring the effect of positive learning. The researchers attribute these results to the fact that the era in which we live, the speed of its events, the loss of calm and the loss of pure

**Table 2:** The arithmetic mean and standard deviation of the test results before transferring the effect of negative energy to the first and third experimental groups.

Groups	Skills	Performance evaluation without the energy effect		Performance evaluation after transferring the effect of negative energy	
		Mean	Standard deviation	Mean	Standard deviation
First	Front waltz.	4.60	0.89	3.60	0.55
	Side waltz.	5.001	0.712	4.410	0.844
	Step jump (bending extension).	4.800	0.837	5.200	0.447
	Step jump (extension bending)	5.400	1.342	5.600	0.548
	Cat jump	5.200	1.095	5.800	0.837
	Scissor jump.	4.200	0.837	5.200	0.447
Third	Front waltz.	4.40	1.14	6.40	0.55
	Side waltz.	5.2	0.825	8.002	0.710
	Step jump (bending extension).	4.800	0.837	7.600	0.548
	Step jump (extension bending)	5.800	1.483	7.600	0.548
	Cat jump	5.400	1.140	8.400	0.548
	Scissor jump.	5.400	1.140	8.200	0.837

**Table 3:** Shows the arithmetic mean and standard deviation of the test results before transferring the effect of positive energy to the second and fourth experimental groups.

Groups	Skills	Performance evaluation without the energy effect		Performance evaluation after transferring the effect of positive energy	
		Mean	Standard deviation	Mean	Standard deviation
First	Front waltz.	4.40	0.89	6.80	0.804
	Side waltz.	5.201	0.841	8.001	0.841
	Step jump (bending extension).	4.800	0.837	8.200	0.837
	Step jump (extension bending)	5.800	1.304	8.000	0.707
	Cat jump	5.400	0.894	8.400	0.548
	Scissor jump.	6.000	0.707	8.200	0.447
Third	Front waltz.	3.80	0.84	4.20	0.45
	Side waltz.	4.601	0.55	5.201	0.841
	Step jump (bending extension).	5.000	1.000	5.200	0.837
	Step jump (extension bending)	5.800	0.447	5.600	1.140
	Cat jump	6.200	0.447	5.600	1.140
	Scissor jump.	5.600	0.548	6.000	0.707

**Table 4:** The results of the difference between the performance evaluation of the tests before and after transferring the effect of negative energy for the first and third experimental groups.

Groups	Skills	Arithmetic mean of difference	Standard error of the mean difference	T value	Level Sig	Type Sig
First	Front waltz.	1.022	0.632	1.581	0.189	Non sig
	Side waltz.	0.600	0.678	0.885	0.426	Non sig
	Step jump (bending extension).	0.400	0.400	1.000	0.374	Non sig
	Step jump (extension bending)	0.20	0.37	0.53	0.62	Non sig
	Cat jump	0.600	0.245	2.449	0.070	Non sig
	Scissor jump.	1.000	0.548	1.826	0.142	Non sig
Third	Front waltz.	2.012	0.547	3.651	0.22	sig
	Side waltz.	2.4	0.6782	3.539	0.024	sig
	Step jump (bending extension).	2.800	0.490	5.715	0.005	sig
	Step jump (extension bending)	1.90	0.56	3.39	0.010	sig
	Cat jump	3.000	0.548	5.477	0.005	sig
	Scissor jump.	2.800	0.583	4.802	0.009	sig

**Table 5:** The results of the difference between the performance evaluation of the tests before and after transferring the effect of positive energy to the second and fourth experimental groups.

Groups	Skills	Arithmetic mean of difference	Standard error of the mean difference	T value	Level Sig	Type Sig
First	Front waltz.	2.4	0.748	3.207	0.033	Non sig
	Side waltz.	2.80	0.583	4.802	0.009	Non sig
	Step jump (bending extension).	3.400	0.600	5.667	0.005	Non sig
	Step jump (extension bending)	2.20	0.508	3.707	0.020	Non sig
	Cat jump	3.000	0.632	4.743	0.009	Non sig
	Scissor jump.	2.200	0.490	4.491	0.011	Non sig
Third	Front waltz.	0.401	0.2444	1.633	0.178	Non sig
	Side waltz.	0.600	0.500	1.177	0.305	Non sig
	Step jump (bending extension).	0.200	0.374	0.535	0.621	Non sig
	Step jump (extension bending)	0.200	0.663	0.302	0.778	Non sig
	Cat jump	0.600	0.400	1.500	0.208	Non sig
	Scissor jump.	0.400	0.510	0.784	0.477	Non sig

nature has exhausted and exhausted the bodies, minds and spirit, and that "a person lives in his house surrounded by many carriers of the negative impact of energy, so many electrical appliances and connections are nothing but negative effects for all organs of the body down to self (Bugliarello, Alexandre, & Barnes, 2014, p. 8) Hence, the impact of negative energy continues on female students, starting from home until reaching college, so the respondents needed to mobilize positive psychological energy. It is synonymous with the need for physical and kinetic mobilization, and any imbalance between physical and kinetic energy and psychological energy leads to disruption of the athlete's access to optimal performance. (Ghazi, 2007), the psychological mobilization with positive energy according to (Allawi, 2002). It means positive motivational activation, which includes stimulating and directing the strength and readiness of the athlete to perform to the fullest extent permitted by his capabilities and ability, struggle and struggle for excellence and success, and try to overcome the obstacles and difficulties he encounters to achieve his goals. The integration of the athlete with the activity he practices, and that "the level of activation has a significant positive role in the performance of daily life duties as well as the performance of sports skills in the sports field." (Arnason, Sigurdsson, & Gudmundsson, 2014) (Raedeke, T. 2008). The athlete needs a certain percentage of arousal in emotion, the intensity of which is commensurate with the quality of performance and the intensity of the competition the control (Sayhood & Dawood, 2021). The researchers believe that positive energy is a neutral term, as the positive energy level does not take into account emotions and excitement as a hindering factor, and does not take into account lethargy and lack of motivation as a deterrent factor for good performance. The energy positively or negatively changes the kinetic behavior positively or negatively, and this is consistent with what was shown by the results of this study, as we find that the procedures for transferring the effect of negative energy from the students (trained in this) affected the performance for the first and third groups, so we find deliberate delay from the lecture,

the heavy movements that were performed (intentionally) by these students, the movements of yawning, laziness, frequent complaining, frequent pauses during warm-up, failure to perform the full number of repetitions, intentionally leaving the running queue and then returning, wearing clothes of inconsistent colors, deliberately taking off one shoe and performing with one, With wearing one black glove and leaving the second hand without a glove, as well as the constant talk about the pain associated with the performance of sports skills, their difficulty and the inability to perform, and that female teachers are not satisfied with the level (Azaab, N. 2020), and it is also emphasized that this performance measurement does not affect the final grade. These negative behaviors send negative energy waves to spread among the students. sees (Cerin, 2003) Negative behaviors create an atmosphere of negativity, reduce excitement towards proper performance, and reduce the desire to achieve performance commensurate with capabilities.

On the contrary, the nature of the behavior of female students dedicated to transmitting the effect of positive energy behaved in a completely different way, as they came early to the classroom, wearing matching balloon sportswear, with a permanent smile, and talking about the fact that the day is beautiful and that the performance will be good, as they deliberately perform the movements Active activities during warm-up and continuous encouragement, and helping each other, as "the serious and responsible behavior of some members of one team sends signals to stimulate positive energy, which improves overall performance" (McCarthy, 2011). A long time ago he made the world (Martin, 1987) , that the subject of psychological energy in sports is an alternative to counseling and activation, and also an alternative to motivation, as they are terminology in the field of general psychology, and thus positive behaviors and charging the body with positive energy lead to the activation of all body functions (Hasoon, & Mutar, 2021). Psychological energy is the strength and intensity of the individual's vitality that drives his

behavior and sharpens the mind to perform its functions. All of these factors are auxiliary factors in improving performance, increasing compatibility, and focusing on correct performance, which is consistent with the results achieved in this study.

### Conclusions

- The results showed a clear improvement in skillful performance after the positive energy transfer procedures, with no improvement in performance with the use of negative energy transfer procedures.

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