

## SOCIAL DESIRE AND PHYSICAL PSYCHOLOGICAL MANIFESTATIONS AND THEIR RELATIONSHIP TO THE PERFORMANCE OF ARTISTIC GYMNASTICS SKILLS

### DESEJO SOCIAL, MANIFESTAÇÕES FÍSICAS E PSICOLÓGICAS E SUA RELAÇÃO COM O DESEMPENHO NAS HABILIDADES DE GINÁSTICA ARTÍSTICA

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#### RESUMO

Conhecer o desejo das alunas de pertencer à comunidade por meio da desejabilidade social, e identificar as manifestações psicológicas físicas se reflete no nível de atuação das habilidades de ginástica artística nos quatro aparelhos. O principal objetivo do estudo foi verificar a relação entre o desejo social e as manifestações psicológicas e físicas no desempenho das habilidades de ginástica artística. A amostra foi constituída por das alunas s da segunda etapa na faculdade de educação física e ciências do esporte da Universidade da Babilônia-Iraque. número (30) para o ano de 2017-2018, utilizam a abordagem descritiva na relação de interconexões do método e nível padrão, e uso de instrumentos estatísticos, média aritmética, desvio padrão, nível padrão, qui-quadrado  $\chi^2$ , cronbach alfa ( $\alpha$ ) e Kuder-Richardson para estabilidade das escalas, e após a distribuição das duas scals na amostra e aplicando os testes das habilidades da ginástica, os resultados mostraram entre moderada, alta e bons valores e relações diretas e inversas. Os resultados mostraram que o desejo social e o desempenho de habilidades de ginástica artística se situaram no nível moderado, o resultado que o manifestações psicológicas físicas no nível superior e uma relação direta entre desejabilidade social e desempenho de habilidades de ginástica artística, ocorreu relação inversa entre as manifestações psicológicas físicas com as habilidades dos movimentos terrestres e direta com habilidades dos outros dispositivo.

**Palavras-chave:** Esporte, Atletismo, Atividades Humanas, Social, Psicologia.

#### ABSTRACT

knowing the desire of female students to belong to the community through the social desirability, and to identify the physical psychological manifestations and this is reflected in the level of performance of artistic gymnastics skills on the four devices, the relationship between the social desire and the physical psychological manifestations and performance of the artistic gymnastics skills. The sample of the research female students of the second stage in the faculty of physical education and sports sciences at the University of Babylon-Iraq. with number (30) for the year 2017-2018, use the approach descriptive in the method interconnections relationship and standard level, and use statistical instruments, Arithmetic mean, Standard deviation, Standard level, chi-square  $\chi^2$ , cronbach alpha( $\alpha$ ) and Kuder-Richardson for stability the scales, and after the distribution of the two scals on the sample and applying the tests of the skills of the gymnastic, the results showed moderate, high and good values, direct and inverse relationships, the results showed that the social desire and the performance of artistic gymnastics skills in the moderate level, physical psychological manifestations in the higher level, the conclusions there is an direct relationship between social desirability and performance of artistic gymnastics skills, and inverse relationship between the physical psychological manifestations with the skills of ground movements and direct with skills of the other device

**Keywords:** Sport, Athletic Performances, Human Activities., Social, Psychology.

## Introduction

Psychology is shared with different human sciences in order to search and investigate the behavioral facts of athletes, including social psychology, and kinetic behavior, to understand the social side and the kinetic perform in practice the athlete activity. Hence the importance of research in studying trends of female students of physical education and sports sciences towards social desire in their interaction with the community in general and the sports community in particular, as well as research in the physical psychological manifestations that appear on students and the level related to the performance of skills on the

artistic gymnastics devices, there are no previous studies of the social desire or the physical psychological manifestations on skills of the gymnastic (artistic for male or female) or even rhythmic gymnastics, research helps on the interest with the social and psychological aspects for female students of the physical education.

The literature gap of research identified the difficulty of knowing the desire of students to belong to the community through the social desirability, and to identify the physical psychological manifestations and this is reflected in the level of performance of artistic gymnastics skills. Social desire means "An individual who believes that he is socially desirable feels that he is a typical person and he has the ability to give the ideal image to others and to have an individual survey for the individual's social status"<sup>1,2</sup>. Physical psychological manifestations area defined by a group of psychological physiological disorders which arise from the psychological factors and take its symptoms, either physically or organically<sup>3,4</sup>.

Artistic gymnastics for female students is one of the sports games dedicated to female students studying in the Faculty of Physical Education and sports Sciences contains the skills of sports practiced on (4) devices are the jumping table, ground movements, parallel device of different height and balance beam<sup>5-8</sup>.

The Research aims were to recognize the social desire and the physical psychological manifestations and artistic gymnastics skills of students of physical education and sports sciences and to assess the relationship of social desire and psychological and physical manifestations with perform the skills of artistic gymnastics. Research hypothesis: Existence of a direct correlation between the social desire, the artistic gymnastics skills and inverse relationships between the physical psychological manifestations and artistic gymnastics skills for female students in faculty of physical education and sports sciences.

## Method

Use the descriptive approach in the standard level method, the interrelated relations to determine the level of the sample in the research variables social desire, physical psychological manifestations and the relationship between their and performance of the artistic gymnastics skills of the female students.

### *Sample*

The community identified the female students in the second stage of the faculty of physical education and sports sciences at the University of Babylon with number (30) of female students; the stage in which the teaching the artistic gymnastics, the sample was selected by comprehensive method (100%).

### *Instruments*

Scientific sources, international internet network, Social desire scale and physical psychological manifestations scale, Devices gymnastics for female students.

Use the scale of social desirability, worked (Sultan<sup>11</sup>) to develop the scale to measure an individual's description of himself in the range of approbation or social desirability, put the scale<sup>3</sup>. The scale contains (10) statements and the answer is (yes) or (no). Appendices (1), phrases are corrected (1, 2, 3, 4, 6, 7, 9, 10) by giving (2) degrees if the answer (yes) and (1) degree if the answer (no) and vice versa two phrases (5.8) and then phrases are collected, the lowest grade obtained by the female student (10) degrees, the closer the degree of the female

student of the maximum degree of (20) indicates the increase tendencies towards social desirability, and the mean center of the scale (15).

Either the scale of physical psychological manifestations worked to develop the scale includes (40) phrases and the answer on one of the three answers (a lot, little, not happen). Appendices (2), and includes the scale on negative paragraphs given to it (3) degrees if the answer a lot, (2) degrees. If the answer is a little, and (1) if the answer does not occur, either the positive paragraphs bearing the numbers (4, 8, 12, 16, 20, 24, 28, 32, 40) are given (3) degrees (Not happen), (2) degrees (a little), and (1) degree of response (a lot). The lowest grade obtained by the female student on the scale (40) degree, and the highest degree (120), and the mean of the scale (80).

### *Statistical methods*

Arithmetic mean, Standard deviation, Standard level, Chi-square  $\chi^2$ , Spearman-Brown coefficient, Pearson correlation coefficient, Cronbach alpha( $\alpha$ ) and Kuder-Richardson<sup>5</sup>.

### *Exploratory experiment*

The experimental survey sample was selected in a comprehensive inventory method from second stage female students (where artistic gymnastics is taught) at the faculty of physical education and sport sciences - Karbala University, about 50 km from the University of Babylon. For the purpose of knowing the efficiency of the assistant work team and determine the scientific basis for tests with determine time of response on the two scales for (5-10) minutes for scale of the social desire and from (10-15) minutes for physical psychological manifestations scale and (20-25) minutes time to perform skills of the artistic gymnastics devices by the gymnastic skills tests.

### *Exploratory experiment , Scientific foundations for research and objectivity*

Honesty has been based on virtual honesty through the presentation of the research scales on the experts and specialists in psychology, tests and measurement, artistic gymnastics of the number of (10) experts at the University of Babylon, and was extracted value (chi-square  $\chi^2$ ) and found that all paragraphs of the two scales valid were determined values of the terms of each scale with degree (10 and 6.4), Which is higher than the value of the table (3.84) at the degree of freedom (1) and the importance level (0.05). Stability

Determine the stability of the scales by relying on half the scale of the individual and marital paragraphs, including the first half individual paragraphs and the second marital paragraphs pearson correlation coefficient was used and correlation values were shown (0.70) for social desire and (0.72) for physical psychological manifestations and after using (Spearman-Brown) equation to determine the stability of the scale completely. The stability value of the social desire Scale was (82.0) and Physical psychological manifestations Scale was (84.0), (Richard Kiodar) Equation used to measure of Social Desire Scale and showed its stability value of (0.83), and the (cronbach alpha) equation for Physical psychological manifestations showed a stability value of (0.85). by using the Cronbach alpha, Kuder-Richardson, Phrases of the scales clear for the sample and efficient team the assistant work and to get the objectivity, first, name of the scale was canceled when it was distributed on the sample to prevent the effect of the title on the objectivity of the answer, in addition to the use of the substantive paragraphs that give the same meaning and vary in writing based on three additional paragraphs for the purpose of determining objectivity only, and dependence on the values of absolute differences between the original and added paragraphs, including the

identification of objectivity through the clarity of the meaning of the paragraphs of the sample and that the objective performance skill was achieved by collecting the degree of skill performance of female students of artistic gymnastics and division of output on the number of female teachers.

### *The main experiment*

Applied 24/1/2018 on (30) female students from the faculty of physical education and sport Sciences at the University of Babylon, for the purpose of achieving research objectives, In the knowledge of independent variables (social desire, physical psychological manifestations) and the dependent variable to perform skills of artistic gymnastics and determining the relationship between independent and dependent variables, the two scales were distributed and the results of the gymnastics skills test were recorded (at the end of the course).

## **Results**

Use characters to indicate meaning (A=Arithmetic mean, D=Standard deviation& L=Standard level). The lowest level of response was determined for the measure of social desire (10) degrees, the maximum range (20), the mean medium of the scale (15) and the standard levels (10-13.3), the weakness level (13.4-16.7), the moderate level from (16,8 -20) good level. Either in the physical psychological manifestations, the minimum limit of response (40), the upper limit (120), and the default mean (80), the standard levels (40-66.6), the weakness level, (66.7-93.3) and the moderate level (93.4-120) high level. The performance of the gymnastic skills, the minimum performance (0), the upper limit (10), the (D = 5), the (L= 0-3.3), the weak level, (3.4-6.7) moderate level, and (6.8-10) good level. The results of the sample were in the arithmetic mean, the standard deviation and the standard level. Skills of the artistic gymnastic (15) Skills. As shown in the Table 1.

**Table 1.** Results of the arithmetical mean the standard deviation and the standard level in the search variables of the female students of the Faculty of Physical Education and Sports Sciences

Variables	N.	Variables	Arithmetic mean(A)	Standard deviation(D)	Standard level (L)
Independent variables	1	Social Desire	15.2	1.5	moderate
	2	Physical Psychological Manifestations	93.5	10.3	high
Dependent variables (Artistic Gymnastics Skills for Female Students)	1	Forward roll	7.1	1.7	Good
	2	Backward roll	6.1	1.4	moderate
	3	Balance skill	7.4	1.1	Good
	4	Headstand	6.7	1.7	moderate
	5	Handstand	5.9	1.4	moderate
	6	Cartwheel	6	1.5	moderate
	7	Jumping on a vaulting table is open the legs	6.1	1.5	moderate
	8	Jumping on the vaulting table is combine the legs	5.6	1.5	moderate
	9	Rolling back on balance beam skill	4.7	2	moderate
	10	Cat leap on the balance beam (exchange of feet)	5.7	1.6	moderate
	11	Jumping and standing on one foot to take the position of the balance on the balance beam	5.4	1.5	moderate
	12	Half-cycle skill on the comb of the feet on the Balance Beam	7.1	1.8	Good
	13	Weighted skill on the top beam on the Uneven Bars	6.4	1.7	moderate
	14	Uneven bars back uprise	4.7	1.2	moderate
	15	Front hip circle	5.2	1.1	moderate
Performance of all gymnastics skills for female students			6	1.5	moderate

Source: Author's data

Sample was in the arithmetic mean, the standard deviation and the standard level as it is:- 1) Social Desire (A15.2, D1.5, L moderate) .2) Physical Psychological Manifestations (A93.5, D10.3, L high) .3) Skill of Forward roll (A7.1, D 1.7, L Good) .4) Backward roll Skill (A6.1, D1.4, L moderate) .5) Balance skill (A7.4, D1.1, L good). 6) Headstand (A6.7, D1.7, L moderate). 7) Handstand (A5.9, D1.4, L moderate). 8) Cartwheel (A6, D1.5, L moderate). 9) Jumping on a vaulting table is open the legs (A6.1, D1.5, L moderate). 10) Jumping on the vaulting table is combine the legs (A5.6, D1.5, L moderate). 11) Rolling back on balance beam skill (A4.7, D2, L moderate). 12) Cat leap on the balance beam (exchange of feet) (A5.7, D1.6, L moderate). 13) Jumping and standing on one foot to take the position of the balance on the balance beam (A5.4, D1.5, L moderate). 14) Half-cycle skill on the comb of the feet on the Balance Beam (A7.1, D1.8, L good). 15) Weighted skill on the top beam on the Uneven Bars (A6.4, D1.7, L moderate). 16) Uneven bars back uprise (A4.7, D1.2, L moderate). 17) Front hip circle (A5.2, D1.1, L moderate). Perform all Artistic Gymnastics Skills for Female Students (A6, D1.5, L moderate) (Table (2)).

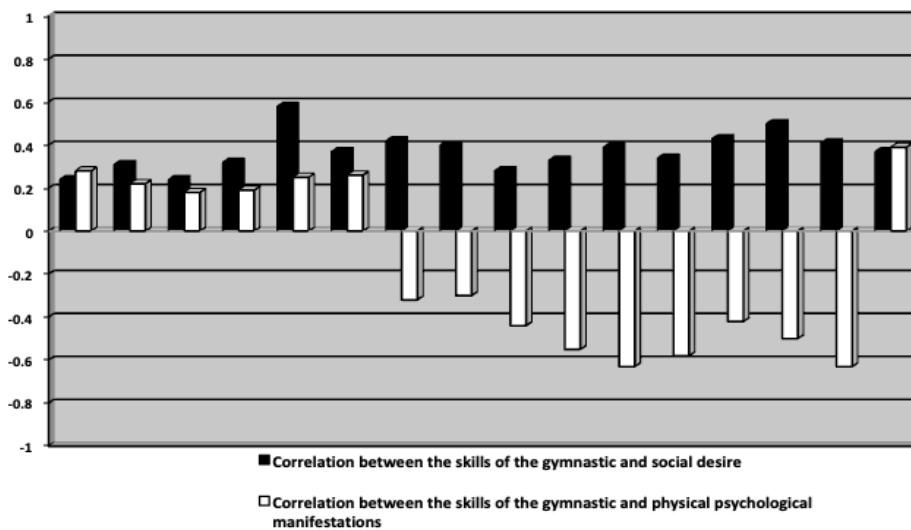
**Table 2.** The relationship between the independent variables (Social desire and physical psychological manifestations) and the artistic gymnastics skills of the female students

No.	The correlation of variables with the skills of the gymnastic	Social Desire	Physical Psychological Manifestations
1	Forward roll	0.24	0.28
2	Backward roll	0.31	0.22
3	Balance skill	0.24	0.18
4	Headstand	0.32	0.19
5	Handstand	0.58	0.25
6	Cartwheel	0.37	0.26
7	Jumping on a vaulting table is open the legs	0.42	-0.32
8	Jumping on the vaulting table is combine the legs	0.40	-0.30
9	Rolling back on balance beam skill	0.28	-0.44
10	Cat leap on the balance beam (exchange of feet)	0.33	-0.55
11	Jumping and standing on one foot to take the position of the balance on the balance beam	0.39	-0.63
12	Half-cycle skill on the comb of the feet on the Balance Beam	0.34	-0.58
13	Weighted skill on the top beam on the Uneven Bars	0.43	-0.42
14	Uneven bars back uprise	0.50	-0.50
15	Front hip circle	0.41	-0.63
	With all the skills of artistic gymnastics	0.37	0.39

Source: Author's data

In order to determine the correlation between the independent variables and the dependent variable skills have determined correlation coefficient values. It was found that the correlative relationship between social desirability and artistic gymnastic skills all determined a positive correlation relationship with the least value (0.24) in balance skills, the highest value (0.58) was with the handstand skill. Either the relationship between the physical psychological manifestations and artistic gymnastics skills is the positive relationship between the lowest value (0.18) with the balance skill and inverse the highest value (0.63-) with two skills jumping and standing on one foot to take the position of the balance on the balance beam and front hip circle.

The values of the correlation coefficients of the skills of the artistic gymnastics were between the lowest and highest correlation values, the lowest correlation coefficient between the social desire and the artistic gymnastics skills reached (0.24) with balance skill, the highest value (0.58) with skill handstand skill. the correlation coefficients in the Physical Psychological Manifestations with artistic gymnastics skills were positive with the skills of ground movements, the lowest value (0.18) with balance skill, the highest value (0.28) with skill of forward roll, and negative values\_ with the skills of the other devices, the lowest value(-0.30) with skill jumping on the vaulting table is combine the legs, highest value (-0.63) with two skills jumping and standing on one foot to take the position of the balance on the balance beam & front hip circle, the correlation between social desire and all artistic gymnastics skills (0.37), physical psychological manifestations with the skills (-0.36).



**Figure.** Shows the correlation of the gymnastic skills with social desire and physical psychological manifestations

Source: Author's data

## Discussion

The result indicates higher the social desire, the better the performance of artistic gymnastics skills and the opposite of the physical psychological manifestations. Where "The literature indicates that socially desirable responding is an individual difference construct in that people vary to the extent to which they are prone to engage in it but that its presence is also a function of the assessment situation itself"<sup>1</sup>. "Social desire when identified, the paths then become informative as applied social science. Recognizing social desire paths in concrete behaviors provides an orienting frame for sociological research to shape policy as well as program creation and improvement the organizational level. Social desire path analysis also offers a distinct sociological approach to capturing interests"<sup>1,5</sup>. Where Social desire is a basic motivation whereby we are driven by what others think about us. This is not a small effect and much of how people behave has this need for approval and liking as a fundamental driver<sup>9</sup>.

This encourages the female student who leads the skills to be a good model in the performance and have a social center depends on the cooperation and help the rest of the female students by raising morale of the female student and cooperation between females student during learning the skills and thus improve the level of performance the skills<sup>10</sup>.

Human is a social creature, and the individual personality is affected in the social environment and the social interactions associated with it and the human needs to others to promote his continued existence, and individuals have instinctive tendencies to connect with others<sup>11</sup>. This connection helps a human to overcome on weakness by cooperating with others"<sup>6</sup>, through cooperation social development "Accompanying the personal cognitive and behavioural strategies, the gymnasts depended on social influences, such as the "coaches' influence and peer support"<sup>10</sup>. "Sport, when practiced fairly, in a social and cultural context, enriches society, and on an individual level, offers the opportunity for self awareness, expression and fulfilment, personal achievement, social interaction, enjoyment, and good health"<sup>11</sup>. "Participation in physical activities and sports among young people promotes social well-being, physical and mental health, academic achievement and skills such as team work, selfdiscipline and socialization"<sup>12</sup>, the findings revealed that the internal attributes (i.e., people

you work with, skill development) of the job were more important than the external attributes (i.e., location, compensation)"<sup>13</sup>.

As for the relationship between the physical psychological manifestations and artistic gymnastics skills need to focus and do not stress while increasing the physical psychological manifestations leads to the opposite, where the physical psychological manifestations are "It is possible to avoid or reduce the negative psychological and physical repercussions consequent to the non-achievement of a goal through a process of adaptive self-regulation targeted at disengaging oneself from an unrealizable goal and concentrating efforts instead on more attainable objectives"<sup>3</sup>. The researcher believes that these factors show the skills that lead to the devices that the female student feels with anxiety and fear from falling or injury including the skills of the balance-balance device, the jumping table or the skills that require physical strength and high dynamic compatibility in the skills of the various parallel height.

Especially if the practitioner is a beginner in practicing artistic skills of gymnastics that is the weakness of psychological preparation generates fear, anxiety and distrust in the female students in the artistic gymnastics and reflected on the performance of skills, and reflects negatively on the psychological stability, so the weakness of the ability to achieve because of psychological factors have a negative effect on the artistic gymnastics" competitive stress and the associated increases in anxiety result in considerable disruption of skill performance"<sup>14</sup>.

Thus, the skills that the learner is not willing to learn and has unpleasant experiences leave him with a reality and a negative effect on himself that he cannot practice and train on. This corresponds to (Thorndike's) laws of learning, namely, "availability rudiment of connectionism claims that students can gain the ease of using knowledge permanently in many different occasions after the learning stages are completed, and the accurate connections are made between the relevant data"<sup>15,16</sup>. If people begin to exercise, they may become more familiar with the physical sensations of exercise, experience less discomfort as they become fit, experience desirable mood changes when they exercise, and begin to enjoy physical activity. As a result, they may be more inclined to exercise on a regular basis as they discover the psychological as well as physical benefits of exercise"<sup>17</sup>. "The United Nations considers sport to be a powerful tool to promote education, health, development and peace"<sup>18</sup>.

## Conclusions

The social desire at the moderate level, and physical psychological manifestations at the high level and the existence of a direct correlation between social desire and the artistic gymnastics skills of and a positive relationship between physical psychological manifestations with the skills of ground movements and reverse with the skills of other devices of female students of physical education and sports sciences.

As recommendations and practical applications we suggest Investing the positive side in the research variables and deal with negative relationships through preparation programs for physical, and counseling of psychological and conducting similar studies on other types of gymnastics (rhythmic, Artistic gymnastics for males student) and other games for the attention on the psychological level and the level of performance of the skills.

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