

THE ROLE OF ADAPTED PHYSICAL ACTIVITY IN REDUCING PSYCHOLOGICAL STRESS AMONG BLIND PERSONS -FIELD STUDY AT THE EDUCATIONAL CLUB FOR THE BLIND IN BISKRA-

Dr. Mouadh Chemini

mouadh.chemini@univ-biskra.dz

University of Mohamed Khider-Biskra, Algeria

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Abstract:

Our current study seeks to find out the effective role that adapted sports activity plays in reducing the level of stress and frustration and thus reducing psychological pressures. This study relied on the descriptive and analytical method as it is appropriate for it, and the questionnaire tool that was designed to measure psychological pressure was applied, and a sample was included. We studied 25 players from the Educational Club for the Blind in the state of Biskra, and after collecting data, processing it statistically, and discussing the study hypotheses, the following results were reached:

*Adapted physical activity has an effective role in reducing psychological stress among blind people.

* Adapted physical activity is important in reducing stress among blind people.

* Adapted physical activity is important in reducing the level of frustration among blind people.

Keywords: psychological stress, blind person, adapted sports physical activity.

Introduction:

The current society lives in difficult and rapidly changing circumstances, which leads to an increase in the psychological pressures present in his life. Psychological pressure is a phenomenon that is considered one of the most prominent challenges that humans currently face. Psychological stress includes many factors that affect the mental, physical, and emotional health of the individual, as the latter is exposed to psychological pressure in many aspects of his life, whether in study, work, or social relationships. Psychological stress has a significant impact on the general health of the individual, as continuous pressures can lead to... It leads to the emergence of problems such as anxiety, tension, frustration, and irritation. It also causes the emergence of many diseases such as heart disease and the digestive system. It may also cause an impact on societal behavior and private relationships.

Coleman (1983) defined psychological stress as an adaptive requirement resulting from situations and reactions to situations in which there are the potential to harm the individual. Psychological pressure refers to adaptive requirements that the individual must deal with when he wants to satisfy several needs (Al-Sumairan and Al-Masaieed, 2014, p. 16). MCGRATH also defined it as a process formed by the feeling that results from a loss of balance between demands

and capabilities, and this is accompanied by a failure that affects the creation of... Psychological pressures (Mohammed, 2005, p. 19)

Adapted physical sports activity for people with special needs is a vital field in the field of physical education and sports, as this field is linked to providing a group of special exercises and physical activities to meet the desires of individuals with special needs. Adapted sports physical activity aims to improve the quality of their physical, psychological and physical lives and raise Physical fitness (strength, flexibility), developing motor skills and enhancing the social development of the individual. Adapted physical activity is considered a very important means that work to improve mental and physical health and enhance social communication through participation in sporting activities that enable them to build friendships, which reduces feelings of isolation and resulting psychological pressure.

Many scientific researches have indicated that there is a positive relationship between adapted physical activity and psychological stress. From this standpoint, we pose the following main question:

Does adapted physical activity have an effective role in reducing psychological stress among blind people?

*** Sub-questions:**

-Is adapted physical activity important in reducing stress among blind people?

-Is adapted physical activity important in reducing the level of frustration among blind people?

*** General hypothesis:**

• Adapted physical activity has an effective role in reducing psychological stress among blind people.

*** Sub-hypotheses:**

• Adapted physical activity is important in reducing stress among blind people.

• Adapted physical activity is important in reducing frustration among blind people.

*** Research objectives:**

Our study aims to:

* Knowing the effective role of adapted physical activity in reducing psychological stress for blind people.

* Providing a deeper understanding of the importance of adapted physical activity in reducing stress among blind people.

* Knowing the positive effect of adapted physical activity in reducing the phenomenon of frustration among blind persons.

*** Significance of research:**

Our research contributes to highlighting the great importance and role of adapted physical activity in alleviating psychological stress among blind people, as this is a reason for enhancing their psychological health and well-being.

Our study also contributes to providing evidence about the importance of adapted physical activity in avoiding psychological stress and improving public health.

*** Definition of research terms:**

Psychological pressure: Cox and Mackay 1978 presented a concept of pressure as a cognitive phenomenon that results from a comparison between what is required of the individual and his ability to confront it. That is, when what is required of the individual is greater than his ability to confront it, it leads to psychological pressure (Rateb, 2004). , p. 136), the latter is considered a reaction that operates at the cognitive, behavioral, and physical levels, and when it is persistent and chronic, it has a negative impact on the individual's health (Chen, 2017, p. 7).

Psychological stress is also defined as the response that people may face to expectations and circumstances that do not match their knowledge and abilities (CSEAS, 2015, p. 9), and it also expresses the non-specific response to any request on the part of the body (Fink, 2016, p. 12).

Procedurally: Psychological stress is a state of tension, anxiety, emotion and frustration that an individual faces in his life and is the result of life pressures that negatively affect his health.

The blind person (people with visual special needs): He is the individual who cannot see the light and objects next to him. He is also unable to learn by using other senses, such as touch (Braille method) (Eliwa, Riyad, and Taher, 2006, p. 33).).

Procedurally: A blind person is a person who suffers from a loss of vision, and this loss may be either complete or partial, as the blind person relies on his other senses to communicate and move around.

- Adapted sports physical activity: These are sports activities that undergo modifications, whether in technical performance or in some laws, so that people with special needs can practice them (Taha and Ahmed, 2005, p. 27). They are also considered educational programs for people with disabilities, as they are based on On a comprehensive assessment to provide the learner with the necessary skills to achieve a life full of entertaining experiences (Iortimah, p. 9).

Procedurally: Adapted sports physical activity is a group of activities modified by specialists in the field of physical education and sports to meet the needs of individuals who suffer from a disability, whether physical or mental.

*** Literature review:**

- A study by Boufarida Abdel Malek (2015) entitled: The role of recreational sports physical activity in reducing psychological stress among secondary school students. This study aimed to highlight the great importance of recreational sports physical activity and its role in prevention, and to obtain more information regarding the various changes that occur. Among delinquent students during and after practicing recreational sports physical activity, it also shows the relationship between practicing recreational sports physical activity in building a normal personality. The study also aims to know the relationship that exists between recreational sports physical activity and psychological pressures for secondary school adolescents, in his study, the researcher relied on the descriptive analytical method, and the questionnaire tool was used. The study sample consisted of 240 students from the third year of secondary school, and the results of the study reached:

There are statistically significant differences in favor of the sample members who believe that recreational physical activity contributes to eliminating the phenomenon of anxiety among third-year secondary school students.

There are statistically significant differences in favor of the sample members who believe that recreational sports physical activity contributes to alleviating frustration among third-year secondary school students practicing in the physical education class.

There are statistically significant differences in favor of the sample members who believe that recreational physical activity makes adolescents more in control of their emotions.

There are statistically significant differences in favor of the sample members who believe that recreational physical activity contributes to alleviating the phenomenon of psychological tension among third-year secondary school students (Abdul Malik, 2015).

A study by Garmit Makhlouf Sami and Ben Haj Jilali Ismail (2022) entitled: The role of recreational sports activity in reducing psychological stress among people with diabetes. This study aimed to identify some variables that the researcher believes are related to the phenomenon studied about recreational sports activity and its importance on the individual suffering from diabetes from a psychological point of view, thus trying to detect it and find solutions for it. In his study, the researcher relied on the descriptive approach, and a questionnaire tool was used.

The study sample included 36 people with diabetes, and the results of the study reached:

Recreational sports activity has a positive role in reducing psychological stress among people with diabetes.

Recreational sports activity contributes to reducing stress among people with diabetes.

Recreational sports activity contributes to reducing the rate of depression among people with diabetes (Garmait and Ben Hadj Jilali Ismail, 2022)

- A study by Ben Abdallah Abdel Kader, Al-Hadi Aissa, and Habara Mohammed (2018) entitled: Sources and levels of psychological stress among visually impaired individuals who practice and do not practice adapted physical sports activities. This study aimed to reveal the most important sources of psychological stress that have the greatest impact on the visually impaired, Also planning to develop guidance and treatment programs for the visually impaired who are exposed to severe pressure and know how to confront these pressures, this study also aims to know the importance of adapted physical activity in reducing levels of stress. The researcher relied in his study on the descriptive and analytical approach, and the sources of psychological stress scale was used. The basic research sample included 15 disabled people, and the results of the study reached:

The level of psychological stress for visually impaired practitioners is low compared to non-practitioners, whose levels were high.

There are statistically significant differences for the visually impaired between those who practice and non-practitioners of adapted physical activity in the level of psychological stress.

There are no statistically significant differences in the measurement scores on all four axes of the scale, as well as in the total score of the scale. Sources of psychological stress for the visually

impaired are due to the variable degree of visual impairment (total, partial) (Abdel Kader, Aissa, and Mohamed, 2018).

*** Field procedures for research:**

1- Study curriculum:

What is meant by the method is a set of rules and foundations that are relied upon in order to reach the facts (Mohamed and Abdel-Wahab Merrouh, 2012, p. 43).

Our study relied on the descriptive approach due to its suitability to the nature of this study. This approach has a distinguished position in the field of human sciences because many researches in this field are descriptive in nature (Al-Machhadani, 2019, p. 125).

The descriptive method is a form of scientific analysis and interpretation that works to describe a phenomenon or problem and then depict it quantitatively. This is done by collecting data and information about this phenomenon and then subjecting it to careful study (Al-Khayyat, 2011, p. 94).

2- Study population and sample:

* Study population: The study population means all the elements that we want to study (Al-Damen, 2007, p. 160).

Our study population was represented by all players of the Educational Club for the Blind in Biskra.

* **Research sample:** It is a subset of elements that were chosen from among the many possible elements that make up the original society in order to conduct a study on it (Al-Assaf and Mahmoud Al-Wadi, 2011, p. 222).

A - Exploratory sample: We chose this sample in a random way, numbering (10) blind players from the research community, where the researcher applied the research tool to them in order to verify its validity, by calculating its validity and reliability, and in the end these individuals were excluded from the basic sample. for study.

B - The basic sample: This sample consisted of (15) blind players from the research community, and this sample were chosen intentionally.

3- Study tool:

In this study, the researcher relied on a questionnaire that measures psychological stress, consisting of 18 statements distributed along two axes:

1- Tension: This axis consists of 09 phrases.

2- Frustration: This axis consists of 09 phrases.

* **Questionnaire:** It is a data collection tool where the researcher asks the respondents specific questions related to the subject of the study in order to obtain data that the researcher uses in completing his study (Hamoud and Moussa Salama Al-Lawzi, 2008, p. 103)

4- Psychometric properties:

The research calculated the psychometric properties of the study tool, and the results were as shown in the following tables:

First: Calculating the reliability of the psychological stress questionnaire using Cronbach's alpha coefficient:

Sam N ple	Items	Cronbach Alpha's Coefficient
10	18	0.701

Table No. (01) shows the Cronbach's alpha reliability coefficient for the psychological stress questionnaire.

Through Table No. (01), which shows the Cronbach's Alpha reliability coefficient for the Psychological Stress Questionnaire, where we find that the Cronbach's Alpha value is 0.701, which shows us that the study tool is characterized by reliability.

Second: Calculating the validity of the psychological pressure questionnaire:

* Calculating the internal consistency validity of the psychological stress questionnaire:

The internal consistency of the psychological stress questionnaire was calculated by calculating the correlation coefficients between each item and the total score of the questionnaire

Item	1	2	3	4	5	6	7	8	9
Correrelation coefficient	,867**	,172**	,453	,354**	,844*	,789	,453	,354*	,844*
Item	10	11	12	13	14	15	16	17	18
Correrelation coefficient	,551**	-,590**	-,406	,633**	,427*	,243	,172**	,453	,354**

Table No. (02) shows the correlation coefficient of each item with the total score of the psychological stress questionnaire.

* Calculating discriminant validity to investigate the role of physical activity in reducing psychological stress:

The role of physical activity in reducing mental stress	Number	<u>Arithmetic average</u>	<u>Standard deviation</u>	Value(v)	<u>Significance level</u>
Higher Category	05	77.67	2.31	89.76	0.01
Lower category	5	17.61	2.63		
Total	10	95.28	4.33		

Table No. (03) shows the differences between the averages of the upper and lower categories of the psychological pressure questionnaire.

Through Table No. (03), we see that there are clear differences between the averages of the upper and lower categories, where the value of (t) was estimated at: 89.76, which is a significant value at the significance level of 0.01, which indicates the discriminatory validity of the psychological pressure questionnaire between the two groups.

*** Presentation and analysis of the study results:**

1- Presentation and analysis of the results of the general hypothesis:

The general hypothesis stated that adapted physical activity has an effective role in reducing psychological stress among blind people. To confirm the validity of this hypothesis, the researcher processed the collected data by calculating frequencies, percentages, arithmetic average, and standard deviation to determine that adapted physical sports activity has an effective role in reducing psychological stress among blind people, as shown in the following table:

The role of adapted physical activity in reducing psychological stress in blind people	Iterations	Percentages	Arithmetic average	Standard deviation
Weak function-42) (18	00	% 00	75.76	5.811
Medium function(43-66)	1	% 6.66		
Effective function (67-90)	14	% 93.33		
Total	15	%100		

Table No. (04) shows the role of adapted physical activity in reducing psychological stress among blind people.

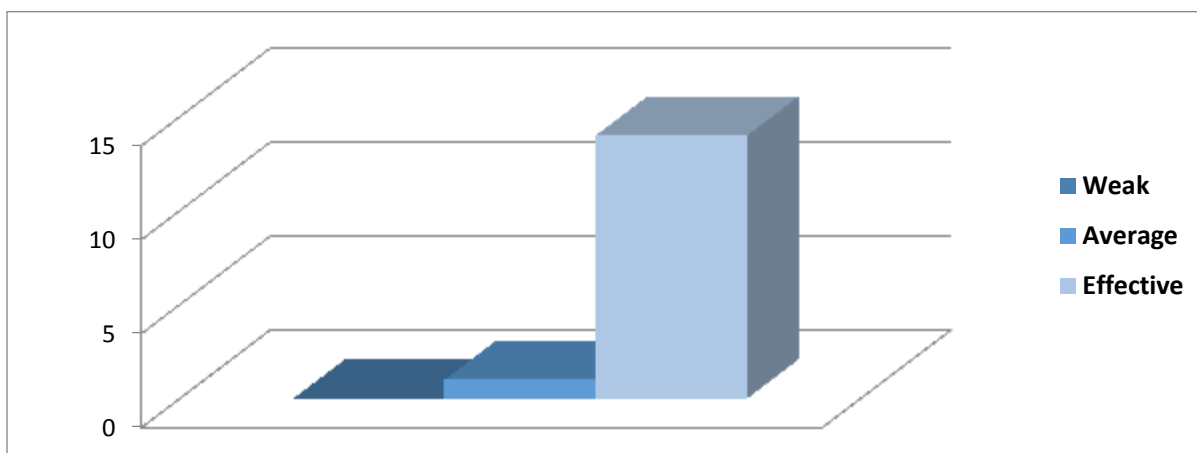


Figure No. (01) shows the role of adapted physical activity in reducing psychological stress among blind people.

Table No. (04) and Figure No. (01) show the blind people’s point of view regarding the role of adapted physical activity in reducing their psychological pressures. The responses of the sample members were distributed according to the following areas:

A. The role of adapted physical activity in reducing stress: “Weak” (18-42): No response was recorded in this area.

B. The role of adapted physical activity in reducing stress “medium” (43-66): In this area, only one response was recorded, at a rate of 6.66%.

C. The role of adapted physical activity in reducing stress: “Effective” (67-90): In this area, 14 responses were recorded, representing a percentage of 93.33%, which is the largest percentage in the responses of members of the study sample.

The arithmetic average reached 75.76 and is in the high range, while the standard deviation reached 5.811.

Through the results obtained by the researcher in this study, we find that adapted physical activity has an effective role in reducing psychological stress among blind people. Therefore, the general hypothesis was fulfilled.

2- Presentation and analysis of the results of the first sub-hypothesis:

The first hypothesis stated that adapted physical activity is important in reducing stress among blind people. To confirm the validity of this hypothesis, the researcher processed the collected data by calculating frequencies, percentages, arithmetic average, and standard deviation to determine the importance of adapted physical activity in reducing stress among blind people, as shown in the following table:

The importance of adapted physical activity in reducing the rate of stress in blind people	Iterations	Percentages	Arithmetic average	Standard deviation
Weak significance(09-21)	00	% 00	37.88	2.906
Average significance (22-32)	1	%6.66		
High significance (34-45)	14	% 93.33		
Total	15	%100		

Table No. (05) shows the importance of adapted physical activity in reducing stress among blind people.

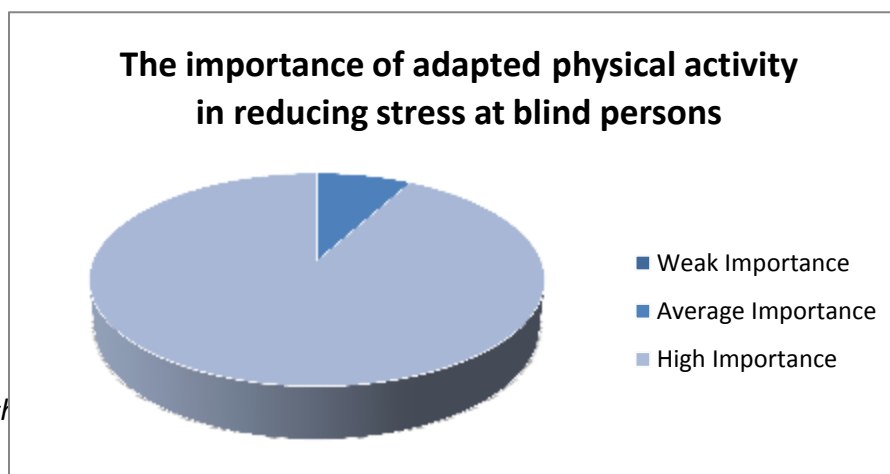


Figure No. (02) shows the importance of adapted physical activity in reducing stress among blind people.

Table No. (05) and Figure No.: (02) show the importance of adapted physical activity in reducing stress among blind people. The responses of the sample members were distributed according to the following areas:

A. The importance of adapted physical activity in reducing stress levels: “Weak” (09-21): No response was recorded for members of the study sample in this area.

B. The importance of adapted physical activity in reducing stress is “medium” (22-33): In this area, only one response was recorded, at a rate of 6.66%.

C. The importance of adapted physical activity in reducing stress levels: “High” (34-45): In this area, 14 responses were recorded, representing a percentage of 93.33%, which is the largest percentage in the responses of members of the study sample.

The arithmetic average reached 37.88 and is in the high range, while the standard deviation reached 2.906.

Through the results obtained by the researcher in this study, we find that adapted physical activity is of great importance in reducing the level of stress among blind people. Accordingly, the first sub-hypothesis was fulfilled.

3- Presentation and analysis of the results of the second sub-hypothesis:

The second hypothesis stated that adapted physical activity is important in reducing the level of frustration among blind people. To confirm the validity of this hypothesis, the researcher processed the collected data by calculating frequencies, percentages, arithmetic average, and standard deviation to determine whether adapted physical activity is important in reducing the level of frustration among blind people, as shown in the following table:

The importance of adapted physical activity in reducing the proportion of frustration in blind people	Iretat ions	Percenta ges	Arithm etic average	Stand ard deviation
(09-21) Weak significance	00	% 00	40.08	3.206
(22-33) Average significance	01	% 6.66		
(34-45) High significance	14	% 93.33		
Total	15	%100		

Table No. (06) shows the importance of adapted physical activity in reducing the level of frustration among blind people

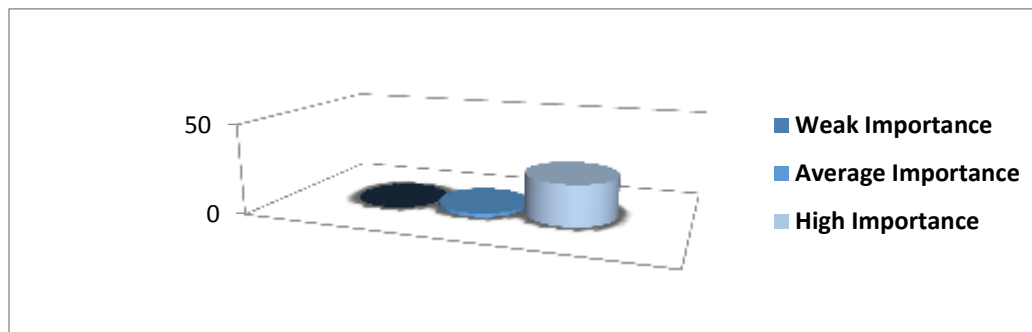


Figure No. (03) shows the importance of adapted physical activity in reducing the level of frustration among blind people

Table No. (06) and Figure No.: (03) show the importance of adapted physical activity in reducing the level of frustration among blind people. The responses of the sample members were distributed according to the following areas:

A. The importance of adapted physical activity in reducing the level of frustration: “Weak” (09-21): No response was recorded in this area.

B. The importance of adapted physical activity in reducing the level of frustration is “medium” (22-33): In this area, only one response was recorded, at a rate of 6.66%.

C. The importance of adapted sports physical activity in reducing the rate of frustration: “High” (34-45): In this area, 14 responses were recorded, representing a rate of 93.33%, which is the largest percentage in the responses of members of the study sample.

The arithmetic average reached 40.08 and is in the high range, while the standard deviation reached 3.206.

Through the results obtained by the researcher in this study, we find that adapted physical activity is of great importance in reducing the level of frustration among blind people. Accordingly, the second sub-hypothesis was fulfilled.

* Discussion and interpretation of the study results:

1- Discussion and interpretation of the first sub-hypothesis:

Adapted physical activity is important in reducing stress among blind people:

To verify the validity of this hypothesis, the researcher calculated frequencies, percentages, arithmetic average, and standard deviation. The arithmetic average for this hypothesis was 37.88, which is a value located in the range (34-45), which is the area of high importance of adapted physical sports activity in reducing stress. Therefore, the results indicate the importance of adapted physical activity in reducing stress among blind people. So, we have verified the validity of the hypothesis.

Many studies have addressed the importance of adapted sports activity in reducing stress, all of which agreed with the results of our study, including:

* A study by Boufarida Abdel Malik (2015) entitled: The role of recreational sports physical activity in reducing psychological stress among secondary school students, which found that there are statistically significant differences in favor of the sample members who believe that

recreational sports physical activity contributes to alleviating the phenomenon of psychological stress among students. Third year secondary school students.

* A study by Qarmit Makhoul Sami and Bin Haj Jilali Ismail (2022) entitled: The role of recreational sports activity in reducing psychological stress among people with diabetes. It was found that recreational sports activity contributes to reducing stress among people with diabetes. The importance of adapted sports physical activity in reducing the level of stress in all people, including the blind, can be explained by the fact that practicing this activity greatly helps in the secretion of happiness hormones, represented by serotonin and endorphins, which improve mood. In addition to this, adapted sports physical activity contributes. In improving sleep and night rest, and thus replenishing the mental and physical energy of blind people, all of this works to reduce feelings of anxiety and tension.

Adapted physical sports activity also provides an opportunity for blind people to focus on their body and movement, which shifts their attention away from negative thoughts. When they are busy practicing sports activity, they enable them to feel movement, strength, and freedom directly, which works to calm the mind and reduce stress.

2- Discussion and interpretation of the second sub-hypothesis:

Adapted physical activity is important in reducing the level of frustration among blind people:

To verify the validity of this hypothesis, the researcher calculated frequencies, percentages, arithmetic average, and standard deviation. The arithmetic average for this hypothesis was 40.08, which is a value that falls in the range (34-45), which is the area of high importance of adapted physical sports activity in reducing the rate of frustration. Therefore, the results indicate the importance of adapted physical activity in reducing the level of frustration among blind people. So, we have verified the validity of the hypothesis.

Many studies have agreed with the results of our current study, including:

* A study by Boufarida Abdel Malek (2015) entitled: The role of recreational sports physical activity in reducing psychological stress among secondary school students, which concluded that

- There are statistically significant differences in favor of the sample members who believe that recreational sports physical activity contributes to alleviating frustration among students. Third year secondary school students practicing physical education class.

The great importance that adapted physical activity plays in reducing the level of frustration among blind people can be explained by the fact that this activity provides an opportunity to express negative energies in a positive way, as the latter contributes greatly to reducing the level of frustration and improving the mood. In addition to all of this, the activity contributes. Adapted physical exercise improves mental health and thus also reduces feelings of frustration.

This can also be explained in the social field, that adapted sports activity gives the blind the opportunity to interact with other people and thus build strong social relationships, as this interaction, social communication and integration into the sports community works to enhance the feeling of belonging and reduce the level of frustration that can be the result of feeling isolated. .

3- Discussion and interpretation of the general hypothesis:

Adapted physical activity has an effective role in reducing psychological stress among blind people.

To verify the validity of this hypothesis, the researcher calculated frequencies, percentages, arithmetic average, and standard deviation. The arithmetic average for this hypothesis was 75.76, which is a value that falls in the range (67-90), which is the range in which adapted physical and sports activity plays an effective role in reducing psychological stress. Therefore, the results indicate that adapted physical activity has an effective role in reducing psychological stress among blind people. So, we have verified the validity of the general hypothesis.

Many studies have addressed the role of physical activity in reducing psychological stress, and among the most important studies whose results agreed with the results of the current study we find:

* A study by Qarmit Makhlof Sami and Ben Haj Jilali Ismail (2022) entitled: The role of recreational sports activity in reducing psychological stress among people with diabetes, the results of which revealed that recreational sports activity has a positive role in reducing psychological stress among people with diabetes.

* A study by Boufarida Abdel Malek (2015) entitled: The role of recreational sports physical activity in reducing psychological stress among secondary school students, which found that there are statistically significant differences in favor of the sample members who believe that recreational sports physical activity contributes to getting rid of the phenomenon of anxiety among students. Third year secondary school students.

The effective role that adapted sports activity plays in reducing the psychological pressures faced by blind individuals can be explained by the fact that practicing this activity has an important role in enhancing their physical and mental health in addition to developing both their performance and social participation and improving their healthy quality of life (Brunes, 2017, p. 265), thus reducing psychological pressures.

These sporting activities also enhance self-confidence and blind people's sense of independence as a result of releasing their negative energies and tensions accumulated within the body, which greatly helps them in reducing the level of psychological stress.

Conclusion:

Finally, it can be said that adapted physical sports activity is of great importance in reducing the level of psychological stress among blind people, as it contributes effectively to improving their physical and psychological health. It also provides them with opportunities for social interaction and building social relationships, which reduces their feeling of isolation. In addition, it Adapted physical activity enhances their quality of life and reduces the level of stress and frustration, thus reducing their psychological pressures.

Recommendations:

Blind people should be encouraged to participate in sporting activities and motivated to achieve their personal goals.

Organizing sports events and competitions for the blind to enhance their sense of participation and belonging to a sports community.

Providing psychological and social support to blind people to deal with the psychological challenges they face.

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