

RESEARCH ARTICLE

The Effectiveness of Certain Recreational Sports Activities in Achieving Life Satisfaction Among Professional Workers Aged 45-55 Years An Experimental Study on Workers of November 1st, 1954 Complex in Djelfa Province

Fathi Bourabia* Berbagui badreddine

Laboratory of Physical Activity, Sports Sciences and Public Health - Mohamed Lamine Debaghin University Setif

fa.bourabia@univ-setif2.dz

Laboratory of Physical Activity, Sports Sciences and Public Health - Mohamed Lamine Debaghin University Setif

b.berbagui@univ-setif2.dz

Abstract;

This modest study aimed to explore both the theoretical and practical aspects of the effectiveness of certain recreational sports activities in achieving life satisfaction among professional workers aged 45-55 years at the sports complex in Djelfa Province. To achieve this, we used the experimental method on a random sample of 20 workers, divided into a control group (10 workers) and an experimental group (10 workers). A "Life Satisfaction" questionnaire was used to collect data, and the results revealed statistically significant differences in favor of the experimental group, indicating that engaging in recreational sports activities contributes to achieving life satisfaction among middle-aged professional workers (45-55 years).

Introduction

The middle age phase has recently garnered attention in the sports field due to its recognition as a time of expertise, which many countries have realized. In the past, focus was mainly on other age groups, especially in recreational sports activities. Recreational physical activity is a system that includes both individual and group activities aimed at strengthening the group to enhance the individual. Recreation, as a form of leisure activity chosen by individuals for personal enjoyment, brings numerous physical, moral, cognitive, and social values (Darwish, 1992, p. 43).

Recreational sports activities are an important aspect of personal development, particularly in achieving self-satisfaction for individuals in general and especially for middle-aged people.

Corresponding Author e-mail: fa.bourabia@univ-setif2.dz

How to cite this article: Fathi Bourabia* Berbagui badreddine. The Effectiveness of Certain Recreational Sports Activities in Achieving Life Satisfaction Among Professional Workers Aged 45-55 Years An Experimental Study on Workers of November 1st, 1954 Complex in Djelfa Province. Pegem Journal of Education and Instruction, Vol. 15, No. 4, 2025, 116-124

Source of support: Nil Conflicts of Interest: None. DOI:

10.47750/pegegog.15.04.08

Received: 12.10.2024

Accepted: 22.02.2025 **Published:** 22.04.2025

116

Middle age is a critical phase often accompanied by depression, isolation, indecision, and physical decline. Life satisfaction represents an ongoing interaction between a person and their environment (Fahmy, 1981, p. 12). Through the practice of recreational sports, individuals can satisfy various needs, including security, social adaptation, and self-esteem. Meeting these needs leads to satisfaction with oneself and life, as mentioned by Maslow in his hierarchy of needs.

The significance of this study lies in recognizing the importance of recreational sports activities for middle-aged individuals and the need to invest their leisure time. Moreover, it seeks to highlight how these activities help in achieving life satisfaction for adults through sports activities tailored to this age group (45-55 years). The study also explores how these recreational activities contribute to life satisfaction for people in this age group.

2. Questions

2.1 General question

Are the proposed recreational sports activities adequate in achieving life satisfaction among middle-aged workers (45-55 years)?

2.2. Partial questions:

- **1-**Are there statistically notable differences when practicing recreational sports activities regarding the dimension of self-satisfaction for middle-aged workers (45-55 years old)?
- **2-**Are there statistically notable differences when practicing recreational sports activities regarding the dimension of family satisfaction for middle-aged workers (45-55 years old)?
- **3-**Are there statistically notable differences when practicing recreational sports activities regarding the dimension of social satisfaction for middle-aged workers (45-55 years old)?
- **4-**Are there any statistically notable differences when practicing recreational sports activities regarding the dimension of professional satisfaction for middle-aged workers (45-55 years old)?

3. Supposition:

3.1 General Supposition:

The proposed recreational sports activities are adequate in achieving life satisfaction among middle-aged workers (45-55 years old).

3.2 Partial Suppositions:

- **1-** There are statistically notable differences when practicing recreational sports activities regarding the dimension of self-satisfaction for middle-aged workers (45-55 years old).
- **2-** There are statistically notable differences when practicing recreational sports activities regarding the dimension of family satisfaction for middle-aged workers (45-55 years old).
- **3-**There are statistically notable differences when practicing recreational sports activities regarding the dimension of social satisfaction for middle-aged workers (45-55 years old).
- **4-** There are statistically notable differences when practicing recreational sports activities regarding the dimension of professional satisfaction for middle-aged workers (45-55 years old).

4. Noteworthiness of the investigation:

The importance of the research can be summarized as follows:

- -Realizing the importance of investing in leisure time for this age group.
- -Realizing the efficacy of recreational sports activities in improving the psychological aspects of the workers.
- -Highlighting the importance of practicing recreational sports activity in achieving life satisfaction at the age of (45-55 years).
- -Spotlighting The importance of practicing recreational sports activity in a person's life, especially in middle age (45-55 years).

5. Concepts and terminology of the study:

5.1 The stage of aging:

The psychology of the elderly focuses on growth in the stage after the completion of maturity, as Hassanein defines it as a person whose strength tends to decline with his exposure to many diseases, feeling tired, and lack of ability to produce. (Hassanin, 2009, p. 28).

5.2 Recreation:

The term "recreation" is derived from the Latin origin, and it was initially used to identify the activity that is chosen for a personal motive and which leads to determining the vitality of the individual so that he is able to practice his work and perform his various activities.

5.3 The theoretical concept of recreation:

Recreation covers generally any pursuit occurring during leisure time other than those to which people have a high commitment (overtime, second job, home study and various maintenance jobs around the house). (Baud-Bovy and Lawson, 2002).

5.4 Sports recreation:

Practicing recreational sports activity is considered a sound path towards attaining public health, as during the practice of this activity the individual achieves full development in the physical, psychological and social aspects, in addition to improving the efficiency of the various body systems, such as the respiratory,muscular, and nervous circulatory systems(Rahma 1998,p9)

5.5 Life satisfaction:

Ali Muhammad Al-Deeb defines it as the individual's acceptance of himself and the lifestyle he lives in the vital context surrounding him. This satisfaction appears in the person's compatibility with his Lord, himself, and his family, his happiness at work, and his acceptance of his friends and colleagues. Al-Deeb defined life satisfaction as an individual's comparison of his circumstances to the ideal level he assumes for himself and his life (Muhammad A., 1994, page 119).

6. Preceding studies:

6.1 Study by Muhammad Zayed 2001 entitled The ability to carry out activities of daily life and its relationship to life satisfaction among the elderly:

The study aims to know the extent of activity in the life of the elderly and that the level of the individual's activity in the stage of advanced age reflects the continuation of the lifestyle patterns that developed in the first period of an individual's life. The researcher used a sample of 200 elderly men and women, 100 with high status and 100 with average status, and using study tools: a measure of daily life activities for the elderly that was prepared by the researcher with the help of (brody 1969, katz1969, mahony 1965, parthal 1965), the most important of which are several measures, as the researcher used the descriptive approach. The study concluded that there is a statistically significant relationship between the dimensions of the ability to carry out daily life activities and the dimensions of life satisfaction for elderly men and women. It also showed that there is a statistically significant relationship between the dimensions of the ability to carry out daily life activities and the dimensions of life satisfaction according to the variables of social status (normal - high) and gender.

7. Comment on previous studies:

Studies focused on the impact of recreational sports activity on the psychological aspect of the elderly.

In light of the results of these studies, the student decided to follow suit in this endeavor by conducting this type of research (the effectiveness of some recreational sports activities in achieving life satisfaction among professional workers aged 45-55 years) on the Algerian environment, especially the state of Djelfa, for the purpose of knowing the effectiveness of recreational sports activities in achieving life satisfaction and identifying statistical differences by studying the dimensions of achieving life satisfaction in pre- and post-measurements among recreational sports practitioners and non-practitioners.

8. Exploratory study:

The exploratory study is considered a preliminary stage in preparing scientific research, as it represents the first step of the study in order to evaluate the research problem and establish it. On this basis, we were able to find a purely scientific basis in order to know the extent to which the psychological state of the elderly is affected by recreational sports practice. For this purpose, we identified A set of tools that will measure the research variables for the purpose of the study, that is, in order to reach a solution to the research problem raised about knowing the effectiveness of practicing recreational sports activities in achieving life satisfaction among a sample of workers aged (45-55 years) who work at the sports complex of November 1 ,1954 in Djelfa. To do this, we followed the following steps.

Firstly:

The questionnaire was presented to a group of workers. The results concluded with almost unanimous agreement that this group (45-55 years) in Algerian society is characterized by a lack of movement, the beginning of the appearance of diseases resulting from the burden of life, as well as psychological and social problems resulting from surplus leisure time. On this basis, we decided to propose a group of diverse sports and recreational activities according to the desires and motivations of this group, in order to occupy and invest their free time in order to reach a high level of satisfaction with their lives.

Secondly:

Through this exploratory study, we found that the total number of professional workers is 64 workers, and those in the age group 45-55 years old consisted of 33 workers at the level of the sports complex of November 1,1954 in the state of Djelfa. This is to systemize the research tools by applying scientific foundations (honesty,

reliability, Objectivity) A random sample was selected from the original community for the research and subjected to the tools developed in this exploratory study.

The process was carried out in two stages, with an interval of 8 days, by answering a questionnaire (life satisfaction) directed at professional workers, by using the test and repeating the same test.

9. Research methodology:

The field of scientific investigation depends on the appropriate approach for each problem, based on the nature of the problem itself; and the approaches used vary depending on the goal that the researcher aims to achieve (Rabah, 1984).

The student researcher used the experimental method due to its suitability to this study and its objectives, in order to identify the extent to which the proposed recreational sports activities contribute to achieving life satisfaction at the age of (45-55 years) among healthy people who practice sports recreation at the level of the sports complex of November 1, 1954 for the state of Djelfa.

The experimental method is considered the most important method used, especially in the sports field. We supported our study with data that enabled us to choose suitable recreational sports activities that serve the subject of our study.

9.1 Research community:

The research community was represented by professional workers aged (45-55 years) at the sports complex of November 1, 1954 in the state of Djelfa who practiced recreational sports activities.

9.2 Research representative:

A - Exploratory representative:

The student researcher selected a survey sample of 33 workers in the age group (45-55 years) who worked at the Sports Complex of November 1,1954 in the state of Djelfa and who practiced recreational sports activities for the purpose of codifying the study tools in order to verify their suitability for use in the Algerian environment according to the applicable scientific principles.

B- The basic study sample:

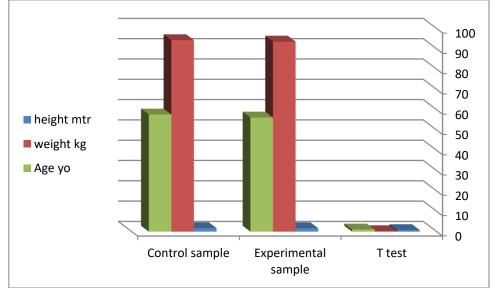
The actual study sample consisted of healthy professional workers at the Sports Complex of November 1, 1954 in the state of Djelfa, who practiced recreational sports activities. The sample was randomly selected and numbered 20 workers to represent the real sample for the study. After that, they were divided into two groups, an experimental group that included recreational sports activities, numbering 10 workers, and a control group, numbering 10 workers, who were not subjected to the principles and controls of the proposed recreational sports activities, taking into account the factor of homogeneity when selecting the sample between the two groups (age, gender, standard of living, and sporting inclinations).

10. Homogeneity of the study groups:

The student conducted equivalence between the experimental and control groups for the purpose of issuing objective judgments about the nature of the homogeneity existing between the two groups through the results of the total pre-tests and using the Student T test of substance in the variables: height, weight, and age, as shown in the following table:

Table (01) The extent of homogeneity between the control and experimental groups:

| - | | | | 8-1-F | | | | | |
|---|-----------|-----------|---------|--------------|--------|---------|--------------|--|--|
| | Search | measruing | Control | Experimental | T test | T table | Significance | | |
| | variables | unit | sample | sample | | | | | |
| | height | mtr | 1.73 | 1.71 | 0.76 | 2.10 | Not a sign | | |
| | weight | kg | 94.30 | 93.60 | 0.22 | | Not a sign | | |
| | Age | yo | 57.7 | 56.2 | 1.06 | | Not a sign | | |



Graphic columns showing the extent of homogeneity between the control and experimental groups Discussion and analysis of the results of Table No. (01), which shows the homogeneity between the two groups:

The extent of homogeneity between the two groups is shown at a substance level of 0.05 and a degree of freedom of 18. It is clear from the table on homogeneity between the experimental and control groups that there are no significant differences before conducting the main experiment, as the T test value reached (0.76 - 0.22 - 1.06), all of which are smaller than the estimated T table is: 2.10 at the substance level of 0.05 and the degree of freedom is 18, which confirms the equality and homogeneity of the two groups before conducting the experiment.

11. Areas of research:

11.1 Time range:

The time allocated to conduct the basic experiment: from 07/01/2024 to 15/04/2024. According to the research requirements, and after completing the exploratory study, the researcher distributed the "Life Satisfaction Scale" questionnaire to the experimental and control research sample, whose number was estimated at 20 individuals, respectively, on 07/01/2024. This was in order to record the results of the pre-tests. Recreational sports activities were applied to the experimental sample for a period of three months, that is, until 15/04/2024, when the test was repeated, that is, the same previous questionnaires were distributed to the two samples to collect the latest results.

11.2 Spatial scope:

The study was conducted at the level of the complex of November 1, 1954, in the state of Djelfa.

- 12. Study variables: The study variables can be determined as follows:
- **A- Independent variable:** recreational sports activities.
- **B- The dependent variable:** The dependent variable in our research is satisfaction with life.

13. Statistical methods:

(Arethmetic mean- standard deviation- T test for differences -sig coefficient)

Research tools:

The researcher used the following tools:

- -Questionnaire.
- -Observation.

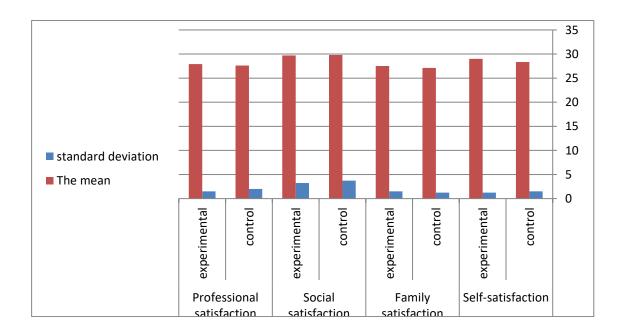
Research difficulties:

- Lack of previous studies.
- Lack of sports facilities for the elderly.
- Difficulty working with the elderly group due to their anger resulting from stress.
- Difficulty in programming recreational sessions at a specific time.

14. Presentation and analysis of the results:

Table No. (2) represents the results of the pre-tests for the control and experimental samples regarding the level of life satisfaction

| Dimensions | The sample | The | standard | T | Degree of | T | Significance | Statistical |
|--------------|--------------|-------|-----------|------|-----------|-------|--------------|-------------|
| | | mean | deviation | test | freedom | table | level | resolution |
| Self- | control | 28.33 | 1.5 | 0.21 | | | | Not a sign |
| satisfaction | experimental | 29 | 1.26 | | | | | |
| Family | control | 27.11 | 1.25 | 0.45 | | | | Not a sign |
| satisfaction | experimental | 27.5 | 1.52 | | 18 | 1.73 | 0.05 | |
| Social | control | 29.82 | 3.74 | 0.46 | | | | Not a sign |
| satisfaction | experimental | 29.70 | 3.25 | | | | | |
| | control | 27.6 | 2.01 | 0.35 | | | | Not a sign |
| Professional | experimental | 27.9 | 1.52 | | | | | - |
| satisfaction | | | | | | | | |



Graphic bars represent the results of pre-tests for the control and experimental samples regarding the level of life satisfaction

Discussion and analysis of the results of Table (2), which represents the results of the pre-tests for the control and experimental samples:

14.1. Presentation and analysis of the results of self-satisfaction: The arithmetic mean for the control group reached 28.33, with a standard deviation $(1.5\pm)$ while the arithmetic mean for the experimental group reached 29, with a standard deviation $(1.26\pm)$. This indicates the convergence of the values centered around the arithmetic mean. To determine the significance of the difference between the two means in the two samples, the Student t test was used, which reached a value of (0.21). This value is smaller than the T table value, which was estimated at (1.73) at the significance level of (0.05) and with a degree of freedom of 18. Accordingly, we conclude that there is no statistically notable difference between the two samples are in self-satisfaction.

14.2 Presentation and analysis of the results of family satisfaction:

The arithmetic mean for the control sample reached 27.11, with a standard deviation of (1.25±), while the arithmetic mean for the experimental sample reached (27.05), with a standard deviation of (1.52±). This indicates the convergence of the values centered around the arithmetic mean. To determine the significance of the difference between the two means in the two samples, the Student t test was used, which reached a value of (0.45). This value

is smaller than the T table value, which was estimated at (1.73) at the significance level of 0.05 and with a degree of freedom of 18. Accordingly, we conclude that there is no statistically notable difference between the two samples in family satisfaction.

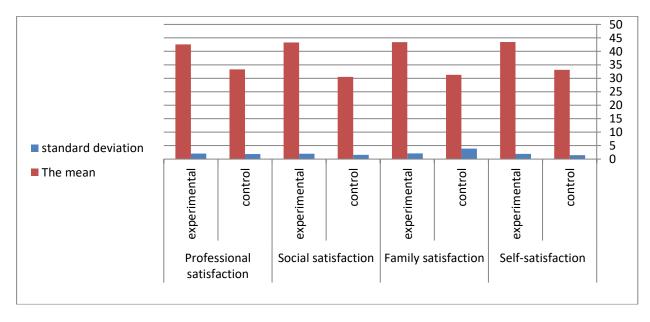
14.3. Presentation and analysis of social satisfaction results: The arithmetic mean for the control sample was 29.82, with a standard deviation $(3.74\pm)$, while the arithmetic mean for the experimental sample was 29.70, with a standard deviation $(3.25\pm)$, and this indicates the convergence of the values centered around the arithmetic mean. To determine the significance of the difference between the two means in the two samples, the Student t-test was used, which had a value of (0.46), and this value was smaller than the T table value, which was estimated at (1.73) at the significance level of (0.05) and with a degree of freedom of 18. Accordingly, we conclude that there is no statistically notable difference between the two samples in social satisfaction.

14.4. Presentation and analysis of the results of professional satisfaction:

The arithmetic mean for the control sample reached 27.6, with a standard deviation $(2.01\pm)$, while the arithmetic mean for the experimental sample reached 27.9, with a standard deviation $(1.52\pm)$, and this indicates the convergence of values centered around the mean. To determine the significance of the difference between the two means for the two samples, the Student t test was used, which reached a value of (0.35). This value is smaller than the T table value, which was estimated at (1.73) at the significance level of 0.05 (with a degree of freedom of 18). Accordingly, we conclude that there is no statistically notable difference between the two samples in professional satisfaction.

Table (03) represents the results of the post-tests for the control and experimental samples regarding the level of life satisfaction

| Dimensions | The sample | The | standard | T | Degree of | T | Significance | Statistical |
|--------------|--------------|-------|-----------|------|-----------|-------|--------------|-------------|
| | | mean | deviation | test | freedom | table | level | resolution |
| Self- | control | 33.16 | 1.47 | 2.61 | | | | sign |
| satisfaction | experimental | 43.45 | 1.94 | | | | | |
| Family | control | 31.27 | 3.92 | 3.41 | | | | sign |
| satisfaction | experimental | 43.39 | 2.10 | | 18 | 1.73 | 0.05 | |
| Social | control | 30.5 | 1.58 | 3.23 | | | | sign |
| satisfaction | experimental | 43.3 | 2.00 | | | | | |
| | control | 33.29 | 1.86 | 2.59 | | | | sign |
| Professional | experimental | 42.58 | 2.06 | | | | | |
| satisfaction | | | | | | | | |



Graphic bars represent the results of post-tests for the control and experimental samples for the level of life satisfaction

15. Discuss and analyze the results of Table (03), which represents the results of the post tests of the control and experimental groups for the level of life satisfaction:

15.1. Presentation and analysis of the results of the first supposition (self-satisfaction):

The arithmetic mean for the control sample reached (33.16) with a standard deviation of (1.47±) while the arithmetic mean for the experimental sample reached (43.45) and a standard deviation of (1.94±). As for the value of the standard deviation for both groups, it does not represent a large value, which indicates the convergence of the values centered around the arithmetic mean. To determine the significance of the difference between the two means in the two groups, the Student t test was used, which reached a value of (2.61). This value is greater than the T table value, which was estimated at (1.73) at the significance level of 0.05 and with a degree of freedom of 18. Accordingly, we conclude that there is a statistically significant difference between the control and experimental samples in the post-measurement of self-satisfaction in favor of the experimental sample, and this confirms the validity of the first hypothesis. There are statistically notable differences in the effectiveness of recreational sports activities on the self-satisfaction dimension for middle-aged workers (45-55 years old).

15.2. Presentation and analysis of the results of the second hypothesis (family satisfaction):

The arithmetic mean for the control sample was (31.27) with a standard deviation of (3.92±), while the arithmetic mean for the experimental sample was (43.39) with a standard deviation (2.10±). As for the value of the standard deviation for the two samples, it does not represent a large value, which indicates the convergence of the values centered around the arithmetic mean. To determine the significance of the difference between the two means in the two samples, the Student t-test was used, which reached a value of (3.41). This value is greater than the T table value, which was estimated at (1.73) at the significance level of 0.05 and with a degree of freedom of 18. Accordingly, we conclude that there is a statistically significant difference between the control and experimental samples in the post-measurement of family satisfaction in favor of the experimental sample, and this confirms the second hypothesis. There are statistically notable differences in the effectiveness of recreational sports activities on the family satisfaction dimension for middle-aged workers (45-55 years), which the student researcher attribute to the proposed recreational sports activities.

15.3. Presentation and analysis of the results of the third hypothesis (social satisfaction):

The arithmetic mean for the control sample reached (30.5) with a standard deviation of $(1.58\pm)$, while the arithmetic mean for the experimental sample reached (43.3) and a standard deviation of $(2.00\pm)$. As for the value of the standard deviation for the two samples, it does not represent a large value, which indicates the convergence of the values centered around the arithmetic mean. To determine the significance of the difference between the means in the two samples, the Student t test was used, which reached a value of (3.23). This value is greater than the T table value, which was estimated at (0.05) at the significance level of 0.05 and with a degree of freedom of 18. Accordingly, we conclude that there is a statistically significant difference between the control and experimental samples in post-measurement in social satisfaction in favor of the experimental sample, and this confirms the third hypothesis. There are statistically notable differences in the effectiveness of recreational sports activities on the social satisfaction dimension for middle-aged workers (45-55) years old), which the student researcher attribute to the proposed recreational sports activities.

15.4. Presentation and analysis of the results of the fourth hypothesis (professional satisfaction):

The arithmetic mean for the control sample was (33.29) with a standard deviation of (1.86±), while the arithmetic mean for the experimental sample was (42.58) with a standard deviation of (2.06±). As for the value of the standard deviation for the two samples, it does not represent a large value, which indicates the convergence of the values centered around the arithmetic mean. To determine the significance of the difference between the two means in the two samples, the Student t test was used, which reached a value of (2.59). This value is greater than the T table value, which was estimated at (1.73) at the significance level of 0.05 and with a degree of freedom of 18. Accordingly, we conclude that there is a statistically significant difference between the control and experimental samples in the post-measurement of professional satisfaction in favor of the experimental sample, and this confirms the fourth hypothesis. There are statistically notable differences in the effectiveness of recreational sports activities on the dimension of professional satisfaction for workers in the middle age stage (45-55 years old).

16. General conclusion:

Finally, in light of our modest study, we conclude the following:

- The proposed recreational sports activities achieved positive development between the pre- and post-tests in favor of the experimental group in the measurements of (life satisfaction), and this is due to their appropriateness to the elderly group.
- The control and experimental groups achieved a noticeable improvement between the pre- and post-measurements in the level of life satisfaction. However, the improvement in the control group was relative and natural, which the student researcher attributes to the participation in some daily life practices, especially sports ones, while the improvement was noticeable and clear in the experimental group.

-The effectiveness of the proposed recreational sports activities appeared on the results of the post-measurements between the control and experimental groups and in favor of the experimental group. This stipulates the extent to which recreational sports contribute to achieving life satisfaction among the age group (45-55 years).

16.1. Recommendations:

- -Attention to practicing recreational sports activities as a major factor that helps in social integration at this stage of life.
- -Spreading cognitive awareness related to recreational sports practice because of its positive repercussions on the psychological aspects and the life satisfaction it achieves.
- -The importance of choosing recreational sports activities that appeal to the motivations of practicing among people of this category.
- -Enriching libraries with research on recreational sports practice in middle age (45-55 years old).
- -Forming qualified personnel in the field of sports recreation for the purpose of optimal investment of leisure time.
- -Generalizing such studies to other segments of society.

17. Conclusion

The group (55-45 years old), or what is known as middle age, is one of the important segments that have provided a lot to Algerian society, as they have spent their lives serving it. Given the problems they suffer from as lack of movement and the resulting physical, social, and psychological damage stemming from the excess of free time, we must, in our field of specialization, find or adopt strategies that include serious solutions that help achieve life satisfaction. This work consists of proposing a set of individual and group recreational sports activities aimed at bringing the practicing individual to an acceptable level of physical, psychological, and social aspects. Accordingly, the experience of our research resulted in the effectiveness of recreational sports activities on a sample of practicing professional workers in all dimensions of life satisfaction, as it served as a panacea for the burdens accumulated on this group, and this is what many associations and international organizations have pursued in an effort to find comprehensive and optimal care for this group (45-55 years old). Based on previous studies and the current

find comprehensive and optimal care for this group (45-55 years old). Based on previous studies and the current theoretical study and on the analysis of the results, we concluded that recreational sports activities showed effectiveness in improving their levels of life satisfaction. The study concluded that it is necessary to use recreational sports activities to ameliorate psychological health, supply qualified personnel to supervise them, and provide their own arenas and spaces.

18. Bibliography List:

- **1.** Abdul Hamid Muhammad Shazly (2001). Psychological adjustment of the elderly, Alexandria: University Library, pp. 104.
- 2. Al-Deeb, Ali Muhammad (1994). The relationship between adjustment and life satisfaction among the elderly and their continued work, Cairo: Egyptian Book Authority, pp. 119.
- 3. Baud-Bovy, M. 2002 Tourism and recreation handbook of planning and design. Oxford: Architectural Press,
- 4. Ibrahim Rahma (1998). The impact of health aspects on educational sports activities. Amman: Dar Al Fikr for printing and publishing, p.9.
- 5. Kamal Abdel Hamid Ismail, Mohamed Sobhi Hassanein (2009). Free time sports for the elderly, Cairo: Dar Al-Fikr Al-Arabi, pp. 2.
- 6. Mr. Al-QusiFahmy (1981). Psychological adjustment theories. Scientific publishing office, pp.12.
- 7. Torki Rabeh (1984). Research methods in educational sciences and psychology, Algeria: National Book Foundation.
- 8. Zaki Muhammad Darwish (1992). The Third Arab Symposium on Sports and Society, Riyadh, pp. 43.