

Greek Traditional Dances Program and Self-Evaluated Effects and Changes in Life

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Abstract—The purpose of the present study was the evaluation of the effects of Greek traditional dancing programs on middle-aged people's life. Seventy one subjects (60 women and 11 men) 51.92±4.99 years old, members of different dance clubs, participated in the research. All the subjects participated in a group dancing program for learning and performing Greek traditional dances once a week. The effects and changes in life due to participation in the Greek traditional dancing program were measured through questions by Chewing, Yu και Johnson ([http://www.krapu4.com/taichi/research/Chewing Yu Johnson B. htm#emotions](http://www.krapu4.com/taichi/research/Chewing_Yu_Johnson_B.htm#emotions)). For data analysis were used the *descriptive analysis* and *Pearson chi-square test* of the *SPSS version 17* for windows. From the results, it was proved that almost 90% of the subjects supposed that their participation in the Greek traditional dancing program had an effect on their lives. The bigger percentage declared that the participation in Greek traditional dances offered them joy, well-being and calmness (33.30%), as well as many effects on their bodies (33.30%), while a smaller percentage claimed that their participation in the program offered them sociability-participation in a group (16.70%) and activity increase (16.70%). In addition, more than 4/5 (86.50%) believe that their participation in the Greek traditional dancing program has changed their confidence concerning their mobility or possible falls. About three-quarters of the subjects (73.70%) consider that their participation in the program of Greek traditional dances influenced in any way their everyday activities. The majority (78.90%) believe that their physical activity has changed as a result of their participation in the program of Greek traditional dances. Finally, all people think they have been benefited from their participation in the Greek traditional dancing program, which is very important. In addition, the *Pearson chi-square test* showed a significant effect ($\chi^2=8.15$, $p<0.05$) of the years that the subjects participated in Greek traditional dancing programs on the feeling of people's confidence in their mobility or possible falls. Thus, as the years of participation in Greek traditional dances are increasing, the feeling of people's confidence in their mobility or even the potential falls is increasing. From the results, it was shown that all the middle-aged people suppose that they have been benefited from their participation in the Greek traditional dancing program.

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The benefits concern their better emotional state expressed in joy, well-being, calmness and sociability-participation in a group, but also their better physical condition, confidence in their mobility and possible falls, increase in their physical activities and the effects on everyday activities. The importance of participation in Greek traditional dances is also worth mentioning. Thus, it could be said that the participation in Greek traditional dancing programs brings about effects and changes on life. Consequently, Greek traditional dances as a regular physical activity may be extremely useful for the quality of life of middle-aged people offering many benefits.

Index Terms—dance, middle aged people, perceived effects, quality of life.

I. INTRODUCTION

Exercise in middle-aged and elderly people other than physical training should also aim at preventing and treating various diseases, as well as the release of emotions, the creation and strengthening of relationships. One way to achieve this is to use motion and especially dance, which is a key means of therapeutic intervention, as it exerts positive physical, psycho-emotional and social influences [1].

Dancing improves morale, reduces the feeling of loneliness, and may contribute to the recovery of certain ailments or psychiatric and mental states [2], [3]. At an emotional level, dancing helps people feel happier and overcome anger, disappointment and loss, while at a mental level, it seeks to enhance cognitive skills, motivation and memory [4].

Dance also offers an opportunity for social interaction. It allows people, young, adult and elderly, to externalize some of their inner thoughts and feelings and then express them through the movement. Moreover, it adds balance to people's lives and brings a sense of integration and well-being [5]. Dancing leads individuals into inner balance, relaxation and comfort while at the same time satisfies the need for personal expression. Therefore, dancing restores inner calm [6].

Furthermore, dancing provides the benefits of exercise such as improved health, well-being, coordination and muscle tone, improved physical condition [4]. In addition, through physical tension, it forms the straightness and elasticity of the legs (knees-ankles) and gives ease to the movement and shift of body weight [6]. Dancing can also improve flexibility, balance, muscle strength, coordination, muscle control and attitude, as well as the ability to relax and concentrate [5].

Thus, in recent years, several adults began participating in dancing activities not only to revive the passion of their youth [7] but mainly to improve their health, since health is the main motivation for adults and older people to participate in exercise programs [8]. However, the effects of dancing, and more specifically the effects of Greek traditional dancing programs have not been studied yet sufficiently, especially with reference to the self-evaluated effects on people's life. Thus, the purpose of the present study is to examine the self-

evaluated effects and changes of Greek traditional dancing programs on middle aged people's lives.

II. MATERIALS AND METHOD

A. Subjects

Seventy one healthy subjects (60 women and 11 men), members of different dancing clubs for learning and dancing Greek traditional dances, were selected randomly and participated in the study voluntarily. An announcement was set up in each dancing club inviting only the members, who fulfilled the inclusion criteria, that is healthy members, men and women, who participated in a group dancing program for learning and performing Greek traditional dances in a dancing club once a week. The Greek traditional dancing sessions were conducted by teachers of physical education with extensive practical experience. The performed Greek traditional dances were from different areas of Greece. In order to begin to dance the subjects were holding each other's hands, creating a hemi-cycle. The performed dances included a variety of simple kinetic patterns with music accompaniment. The dances' intensity ranged from low to high, with frequent rhythm alternations so that the subjects could keep dancing continuously throughout the dance session. Essential breaks of approximately 10 sec in between dances in order to change dance were made. The duration of each dance was about 2.5 to 3 min. The session duration was 60 min in total.

During the conduction of the survey, the individuals participated once a week in a 60-minute group program for learning and practicing Greek dances for about 5 months. That is, the subjects were in the 18th session/lesson of Greek traditional dances of the year. The 18th session/lesson was chosen, because at this stage the dancers learn and repeat a fairly large number of dances, find their pace, relax and become familiar with each other and of course do not focus solely on the simple execution of the steps but they leave aside the steps, since they know the dances and no longer need to measure steps, and aim at a higher level of skill.

A written informed consent for the participation in the research was obtained from each subject. All the subjects, before the beginning of the research, underwent medical control so that it could be certified that they do not suffer from any cardiovascular or other disease and, also, that they do not take any medication. Additionally, they answered a questionnaire about any health problem, while a research assistant was present in order to give any essential clarifications if she was asked to. Subjects' age ranged from 45 to 60 years (M=51.92, SD=4.99).

B. Procedures

An approval for conducting the research was given from the committee of each dancing club, after the aim and the conditions of the research were described. The procedures were in agreement with the ethical standards of the Declaration of Helsinki of the World Medical Association (2000).

All the subjects came to the dancing club where they were members, in scheduled afternoon hours. Before the beginning of the research, a description of general requirements was given and, also, the aim of the research

was described to the participants without any briefing relative to previous research findings. The psychological instruments were also presented and the instructions were explained for each one of them. The need for absolute honesty and precision was particularly emphasized. All subjects completed the questionnaire once.

C. Scale of measurements

The effects and changes in life due to participation in the Greek traditional dancing program were measured through the following questions by [9]:

1. Has participation in the Greek traditional dancing program had any noticeable effect on your life?
2. Has participation in the Greek traditional dancing program change the feeling of confidence in your mobility or possible falls?
3. Has participation in the Greek traditional dancing program affected your daily living activities in any way?
4. Has your normal physical activity changed as a result of your participation in the program?
5. Do you feel that you benefited from participating in the Greek traditional dancing program?

All questions were answered once. The questionnaire was translated in Greek following a standard procedure involving the discussion of multiple alternative wordings by a group of five bilingual experts.

D. Data Analysis

For the statistical analysis the statistic packet *SPSS/PC Version 17.0* for windows was used. *Descriptive analysis* and *frequencies* were used. *Pearson chi-square test* (χ^2) was also used to evaluate significant correlations. The level of significance was set to $p < 0.05$.

III. RESULTS

In Table I the anthropomorphological characteristics of the subjects of our group are presented. Moreover, the years that the subjects participate in Greek dancing programs are presented.

Table I. Sample's anthropomorphological characteristics

Variables	Experimental Group N=71
Age (years)	51.92±4.99
Height (cm)	166.06±6.85
Weight (Kg)	70.69±9.62
Body Mass Index (BMI) (Kg/m ²)	25.64±3.26
Participation in Greek dancing programs (years)	3.30±3.78

As it is shown in Table I, the subjects participate in Greek dances programs for several years (3.30±3.78 years), once a week, for 60 min. Below are presented the answers to the questions by [9] as for the exerted effects and changes in life, due to the participation in the program of Greek traditional dances.

In Fig. 1 is presented the evaluation of the subjects of whether their participation in the Greek traditional dancing program had effects on their lives. As it is shown in Fig. 1, almost 90% of the subjects suppose that their participation in



the Greek traditional dancing program had an effect on their lives.

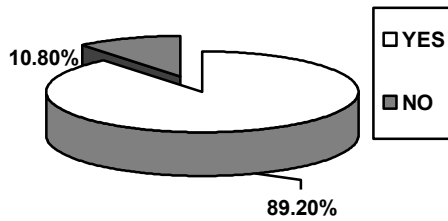


Figure 1. Subjects' evaluation of whether their participation in the Greek traditional dancing program had effects on their lives

In Fig. 2 is presented what these effects concern, according to the declarations of the subjects.

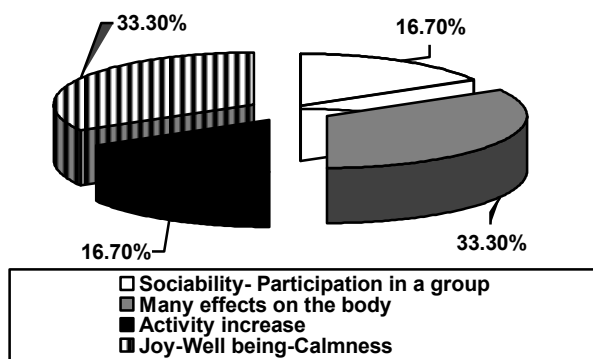


Figure 2. Subjects' evaluation concerning the effects of their participation in the Greek traditional dancing program on their lives

As it is shown in Fig. 2, the bigger percentage declare that the participation in Greek traditional dances offered them joy, well-being and calmness, as well as many effects on their bodies. In Fig. 3, it is presented the subjects' evaluation about whether or not their participation in the Greek traditional dancing program changed the feeling of confidence concerning their mobility or possible falls.

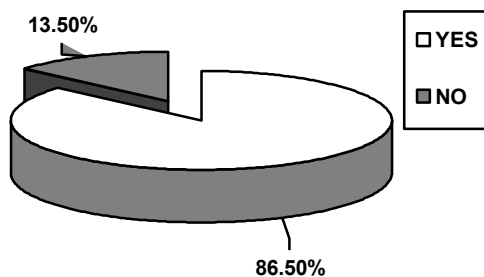


Figure 3. Subjects' evaluation about whether the participation in the Greek traditional dancing program changed the feeling of confidence concerning their mobility or possible falls

As shown in Fig. 3, more than six/sevenths of people feel that their participation in the Greek dancing program changed their sense of confidence in their mobility or/and possible falls. In Fig. 4, it is shown the subjects' assessment of whether the participation in the program of the Greek traditional dances influenced in any way their daily activities.

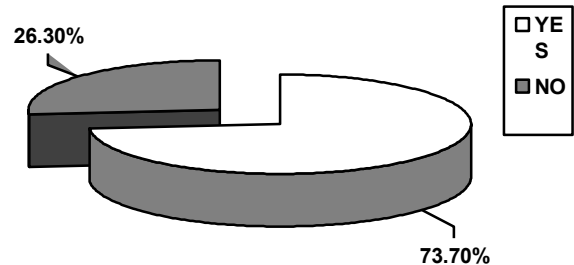


Fig. 4. Subjects' evaluation of whether the participation in the Greek traditional dancing program affected their daily living activities in any way

As shown in Fig. 4, about three-quarters of the people feel that their participation in the Greek dancing program affected in some way their everyday activities. In Fig. 5, people's assessment of whether their physical activity changed as a result of their participation in the Greek traditional dancing program is presented.

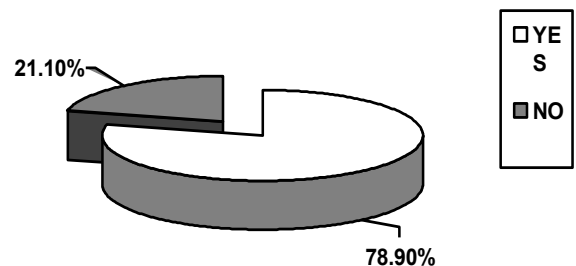


Figure 5. Subjects' evaluation of whether their physical activity changed as a result of their participation in the Greek traditional dancing program

As shown in Fig. 5, about 4/5 of the people consider that their physical activity changed as a result of their participation in the Greek traditional dancing program. In Fig. 6, individuals' evaluation of whether they feel they have benefited from their participation in the Greek traditional dancing program is presented. As shown in Fig. 6, all the individuals believe they have benefited from their participation in the Greek traditional dancing program, which is a very important fact.

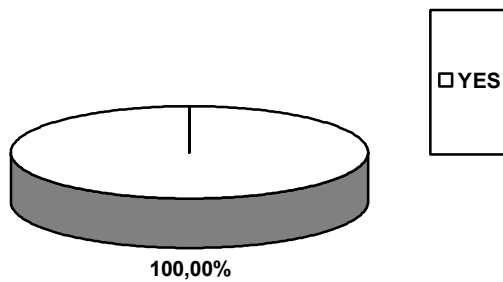


Figure 6. Subjects' evaluation of whether they have benefited from the participation in the Greek traditional dancing program

Subsequently, possible differences and correlations between the years of participation in Greek traditional dancing programs and the answers in the different questions were examined by *Pearson chi-square test* (χ^2). The analyses showed a significant effect ($\chi^2=8.15$, $p<0.05$) of the years of participation in Greek traditional dancing programs on the feeling of people's confidence in their mobility or possible falls. Thus, as the years of participation in Greek traditional dances are increasing, the feeling of people's confidence in their mobility or even the potential falls is increasing.

IV. DISCUSSION

From the results of the present study it was found that almost all the subjects suppose that their participation in the Greek traditional dancing program had an effect on their lives. Individuals report results like sociability-participation in a group, many effects on the body, activity increase, joy, well-being and calmness. In agreement, a study on the participation motives of foreign adults in the learning of Greek dances, it was found that these are the rejection of boredom, social relations-friends, the knowledge of local culture, the improvement of dancing skills, health, the acquisition of new experiences [10]. A similar study with Greek adult dancers concludes that the above incentives for participation include popularity [11]. It is, therefore, clear that the effects of Greek traditional dances in the lives of the participants are on many levels.

It can also be said that all forms of dancing tend to create feelings of integration, well-being and love for dancing and add balance to the dancer's life. These feelings of well-being relate to mind and body as an example of how dance activity can be related to an integrated mind and body working together to promote health [5], [12]. Circular dance, in fact, builds mental health in terms of expressing a series of emotions through various body movements and dancing with a wide range of international music. The expression of emotion is often interpreted actively, although it is sometimes difficult to express it in words, since individuals regulate their personal mental health according to the specific "dance culture" [13], [14].

Moreover, the results showed that about 3/4 of the subjects (73.70%) consider their participation in the Greek dancing program to have an impact on their everyday activities. In agreement with other studies it appeared that the elderly participants in circular dance recognize the importance of exercise to maintain their mobility [15], [16], [17]. Elderly dancers claim that through circular dance they improved the functionality of their body while recognizing their limits and feeling younger because of the opportunity to exercise and reduce their weight [18], [19]. They also evaluate their personal value and their adequacy more positively than those who follow a sedentary lifestyle [20]. It can, therefore, be said that dancing movements increase body knowledge and motor skills [21], [22], [23], [24].

Dancing-like exercise can also affect the daily activities of participants, leading to benefits and thus improving the quality of life of older people living in a nursing home [25], [26]. A survey carried out in nursing homes in Brazil highlighted the importance of encouraging activities among the elderly population in order to preserve their independence and autonomy, and revealed that dance was one of the activities used by the elderly to achieve these goals [27]. Besides, the experience of movement in dancing allows participants to gain a sense of unity with the inner self and to get to know their inner energy better [5]. In addition, other researchers [28] found an improved performance in everyday activities for older women following a traditional Korean dancing training program.

In agreement with this research, about 4/5 of the people consider that their physical activity changed as a result of their participation in the Greek traditional dancing program. This is very important, since people who exercise realize that they are more active than their peers (social comparison) and determine their physical activity as more frequent and intense compared to the typical one for these age groups, have a sense of achievement and attainment, and determine their health in positive terms [29], [30]. This reasoning is based on Homan's exchange theory [31].

From the results of this research, it is also shown that more than 6/7 of the subjects feel that their participation in the Greek dancing program has changed their confidence in their mobility or possible falls. This finding is particularly important for the value of Greek traditional dances in fields like mobility, balance, safe movement, the possibility of falling, etc. This may happen as dancing can improve flexibility, balance, muscle strength, coordination, muscle control and posture [5]. Increased balance, besides, is particularly important because it enables elderly people to live independently in their homes [32], [33]. Moreover, the contribution of music is considered important, as an integral part of dancing, since it has been proved that rhythmical music improves walking co-ordination and movement proprioceptive control and leads in increase of stability and mobility [34], [35]. In accordance with these results, research has shown that dance-like exercises such as Tai Chi or traditional Korean dance can improve the flexibility and mobility of older people, thereby reducing the risk of falls [32], [33].

Mavrovouniotis et al. [36], apart from that, found out that Greek traditional dances increased dynamic balance. It has been found that the lateral sway of the center of pressure, during unilateral leg movements which were performed while standing, was smaller in dancers than in untrained subjects

[37]. Thus, dancing and creative dancing, with its heavy emphasis on static and dynamic balance, affects motor performance and self-concept. Under these circumstances, dancing seems to be an ideal activity for children [38], for athletes of various sports, for older people [5], [32], [35], for persons with balance, and/or kinaesthetic problems [39], [40], or for hearing impaired persons [41], [42].

Therefore, it can be said that dancing not only affects the physical condition positively, but also promotes benefits to the health of individuals. However, in order to have long-term results, participation in dancing programs should be of long duration [28]. In agreement, from the results of this research it appeared that the years of participation in Greek traditional dancing programs have a significant influence on the people's confidence in their mobility or even the possible falls. Thus, as the years of participation in Greek traditional dances increase, the feeling of people's confidence in their mobility and even the potential falls is increasing.

It is also important that all individuals consider that they have been benefited from their participation in the program of Greek traditional dances. In agreement, in other studies, dancing led to health promotion for the elderly who are characterized as socially isolated, physically or mentally ill, or somehow with particular needs [43], [44], [45], [46], [47].

Moreover, it has been found out that the old people who participate in Greek dancing programs have a better picture for their body limbs and functions, as well as bigger satisfaction than their age peers who do not participate in similar programs [48]. It is worth to mention that, for older dancers, the performed dancing forms are considered beneficial for their physical health, in light of exercise, functionality, body weight and mobility. These physical benefits are often associated with psychological and social supplies [12]. Moreover, many elderly participants in a circular dance recognize the importance of exercise for health and disease prevention [15], [16], [17], [49], [50].

V. CONCLUSION

Summing up, from the present study it was shown that all the middle-aged people suppose that they have been benefited from their participation in the Greek traditional dancing program. The benefits relate to their better emotional state expressed in joy, well-being, calmness and sociability-participation in a group, but also to their better physical condition, confidence in their mobility and possible falls, increase in their physical activities and the effects on daily living activities. The importance of participation in Greek traditional dances is also worth mentioning. Thus, it could be said that the participation in Greek traditional dancing programs brings about effects and changes in life. Consequently, Greek traditional dances as a regular physical activity may be extremely useful for the quality of life of middle-aged people offering many benefits.

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