Develop Your Creativity

MUSICAL MOVEMENT - INCL. PHYSICAL ACTIVITY WITH THE USE OF ENERGIZING MUSIC THAT WILL AWAKEN ENERGY IN ADULTS AND ENCOURAGE THEM TO TAKE CARE OF THEIR OWN HEALTH AND PHYSICAL FITNESS

SCENARIO II

Co-funded by the European Union

LEADER: STOWARZYSZENIE KREATYWNI DLA BIZNESU

PARTNERS: GLOBAL ORGANIZATION FOR DEVELOPMENT; FERI FUNDACJA EDUKACJI, ROZWOJU I INNOWACJI; DIALOG of Transformation

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I Informacje ogólne

Duration of the workshop:

6 Hours

Recipients of classes:

The recipients of the workshops are adults aged 45-70 who are members of the Universities of the Third Age, Senior Clubs, libraries, community centres, thematic circles or other places associating the elderly. The scenario can be used by the elderly, who often have issues with physical activity. Combination between physical activity and music will lead to positive changes in their attitude, mind and physical condition.

Ilość uczestników:

Workshop group for 10 people of any gender. It is also possible to conduct workshops in a smaller group of at least 6 people, depending on the conditions of the premises, but not more than 14 people.

Teaching methods:

- talk,
- presentation,
- practical exercises,
- explanations,
- observation,
- discussion.

GENERAL INFORMATION

Equipment/Facilities used:

- Speakers;
- Headset;
- Mat;
- Computer equipment /laptop,
- Projector and Internet.

Purpose of the classes

Information for the presenter

On completing the classes, a participant shall:

- Be able to know the role and influence of music in physical activity
- Be able to do sports with appropriate music
- Be able to know which exercises are good and heathy for his age
- Be able to avoid dangerous exercises

List of competences acquired during the classes:

- Musical and workout competences of a 45 age old + participant
- How music helps to exercises better.

II INTRODUCTION

Introduction of the workshop leader (10 min.)

The leader introduces themselves and says their:

- Full name
- Education
- Experience
- Interests

Group rules (15 min.)

The workshop leader distributes two sticky notes to the participants and asks the participants to write down on one of them what we do and what we do not do during the workshop to ensure a nice and safe atmosphere. The leader gives participants -2 minutes for this task.

Example:
What we do:

- We are polite to each other
- We respect each other
- We communicate breaks

What we don't do:

- We don't criticise others
- We don't use our phones
- We don't critique others answers

The workshop leader collects the sticky notes, reads them aloud and asks if everyone agrees to the presented rules. They stick them in a visible place or ask one of the class participants to do so. Then they suggest that the participants write their name on the second piece of paper and stick it in a visible place on their chest.

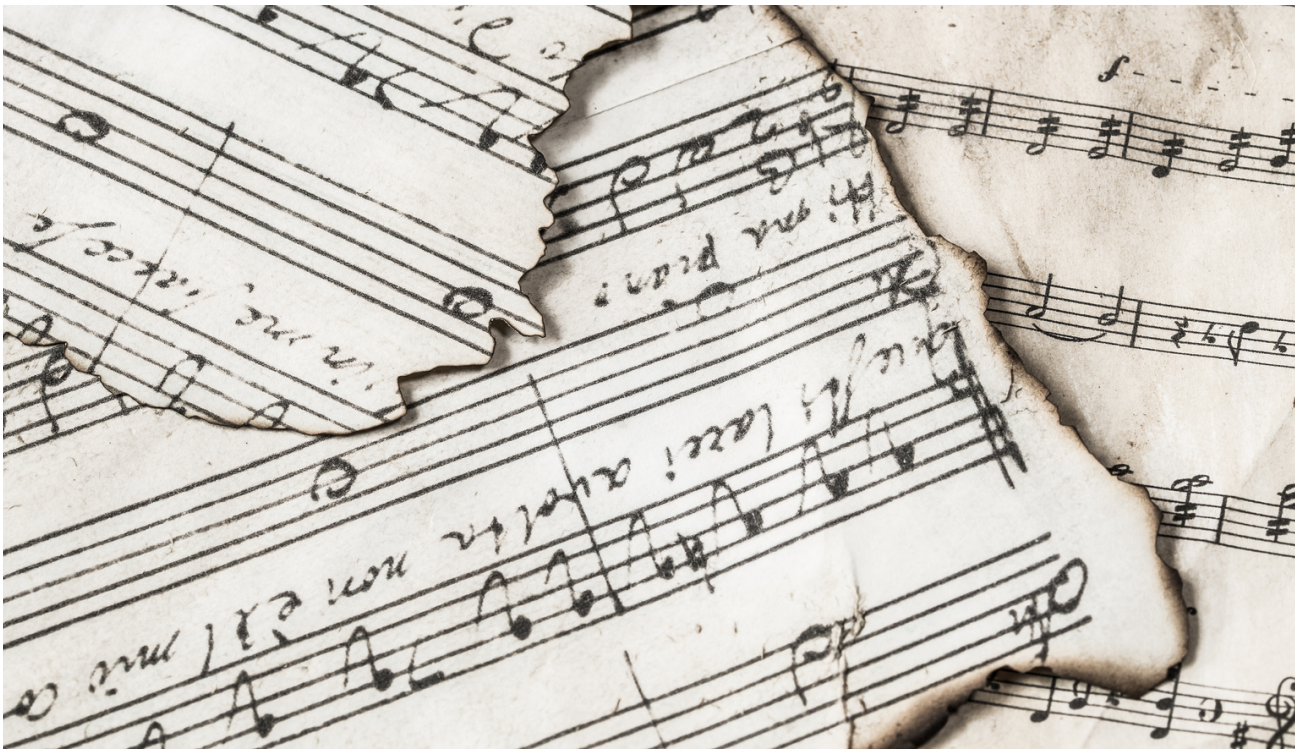
III. SUBSTANTIVE CONTENT

Part 1.

Introduction to the topic

The trainer presents the lecture bellow about the most used media platforms in 2022 and stress on the age and interests of of the users' audience.

Even before spoken communication, music has been a crucial part of human civilization and progress. It permeates every community on Earth, from the most agrarian to the most technologically modern, in varied forms. Our daily lives are punctuated by music, which also goes along with a wide variety of activities: it is an essential component of initiation rituals, weddings, and funerals; mothers use it instinctively to comfort a restless child; it rouses soldiers as they prepare to fight and helps to coordinate their onward march; it enhances our most private moments; and it permeates many aspects of exercise and sport. Indeed, music is so essential to the human condition that it was once said by the famed German philosopher Friedrich Nietzsche that "Without music, life would be a mistake."



Governments and national health providers in many developed countries are becoming increasingly concerned about a dramatic rise in obesity, physical inactivity, and cardiorespiratory disorders. One of the main risk factors for noncommunicable illnesses, the world's leading cause of mortality, is a lack of physical activity. The lack of enjoyment experienced during physical activity is a well-known obstacle to continuing participation.

Accordingly, a paradigmatic shift from cognitivism to hedonism has been observed in the field of exercise and health psychology in recent years. This change has the practical result that messages emphasising the benefits of physical exercise (i.e., "it's really good for you") should be supported with a focus on positive and delightful experiences.

Physical exercise must be practiced regularly and habitually in order to reap its benefits. Because of this, the psychological factors that support physical exercise adherence have been brought into sharp focus.

The Role of Music in Physical Activity

Lack of pleasure is commonly noted as a deterrent to engaging in physical activity in industrialized nations where the majority of people do not perform manual labor. The ability of music to foster more positive mood states and enjoyment has been used to explain the pervasive and culturally dominant influence of music in the field of physical exercise. Researchers believe that music may help improve physical activity compliance and results among individuals who appear to be in good health as well as those engaging in remedial physical activity as part of a rehabilitation program because of its emotive aspects.

The term "**physical activity**" refers to a wide range of actions that are physically similar but otherwise highly different. These behaviors can range from participating in highly organized sports, regimented exercise, or dancing classes to less organized physical activities including walking, cleaning, gardening, and manual labor. We have restricted the scope of the current analysis to exercise and sport, two distinct types of physical activity.

We considered the inclusion of dance-related research since dance is a prevalent form of physical exercise and is closely tied with music. The enormous body of dance-related studies was not included in the present analysis, however, for at least two strong reasons. First off, summative assessments of dance therapy's advantages have already been written. Second, we concentrate on categories of physical activity where the presence of music could improve the experience (e.g., in terms of performance levels or psychological responses) by enhancing any intrinsic advantages of the activity. Therefore, we excluded physical activities in which music plays an important role, such as dancing, ice skating, and rhythmic gymnastics. Since such activities involve the physical interpretation of musical compositions, and music is at the heart of it, analyzing the influence of music on the human organism's response itself is a considerable challenge.

Suggested Benefits of Music in Exercise and Sports

Research into the benefits of music in physical and athletic activity has a long history, dating back at least to Ayres (1911). Ayres (1911) observed that participants in a six-day bicycle race traveled 8.5% faster when a military band was playing. Since then, music has been shown to be associated with a wide range of improvements in physical performance.

There is evidence that music produces several interrelated benefits in exercise and sport-related tasks. For example, pre-task music has been successfully used as a stimulant or relaxant. The use of music during physical activity can induce positive emotional states and distract exercisers and athletes from the unpleasant sensations associated with exercise and fatigue. These benefits may contribute to the ergogenic effects identified in empirical studies. These effects include increased strength and power output, increased stamina, and increased work speed. Ergogenic effects were reported both when participants synchronized their movements with the music and when they did not. The nature of music delivery (ie, pretasking vs. synchronous vs. asynchronous) is of considerable empirical and theoretical interest.

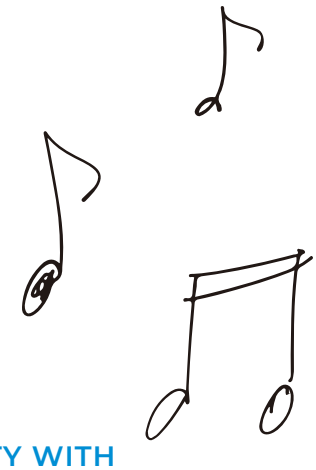
The role of music in aiding recovery after physical activity has been relatively understudied, although the literature on the subject has increased recently. Several studies have demonstrated the effectiveness of relaxation music in producing restorative effects after moderate and vigorous physical activity. The ability of music to induce a variety of physiological changes, including respiration, heart rate, skin conductance, motor patterns, neuroendocrine responses, and immune function, has been empirically demonstrated. Similar physiological effects of music have also been observed during physical activity.

Inherent properties of the musical stimulus itself can be grouped into four categories:

- rhythmic response,
- musicality,
- cultural influence,
- relevance.

Rhythmic response refers to the natural response to the rhythm of music, especially tempo (the speed of music measured in beats per minute). Musicality refers to pitch-related elements such as harmony and melody. Cultural influence is the spread of music within a society or subcultural group. Association refers to the non-musical associations that music can evoke, such as Vangelis' composition Chariot of Fire with Olympic glory. As rhythmic response and musicality relate to the audible properties of musical stimuli, they represent internal factors, while cultural influences and relevance represent external factors.

In the world of sports, athletes use music to relax, be inspired, and create a particular mindset before competition. Sporting event organizers use music to create an atmosphere of crowd excitement, patriotism, or tension. It is clear that many people intuitively believe that music has potential physical activity benefits, but compelling evidence for such benefits has yet to be objectively compiled. The specific effects of music in the context of physical activity depend on a variety of musical, personal, and situational variables. Such variables include age and gender, familiarity with music, musical preference, musical tempo, intensity of physical activity, exercise status of participants, and the specific type of physical activity. In particular, music preferences are examined by coding researcher-selected or self-selected music. The tempo of the music is determined by encoding tempo _120 bpm and _120 bpm. In particular, 120 BPM is an important threshold from the conflicting perspectives of musical aesthetics, human movement, and neurophysiology. Physical activity intensity was assessed using 70% of aerobic capacity (V ˙ O2 max) as a cutoff, and classified into low-to-moderate activity below this intensity level and high-intensity activity above this level. Although this cut-off point is generally thought to mark the onset of the switch from aerobic metabolism (i.e., in the presence of oxygen) to anaerobic metabolism (i.e., in the absence of oxygen), this metabolic switch is cardiopulmonary. Participants' training status is examined by coding their activity level, using regular physical activity participation (_3 times/week) as the boundary between trained and untrained.



The training situation is worth investigating. This is because music can be an extrinsic source of motivation and an easy form of dissociation for people who struggle to adhere to minimal physical activity guidelines. The nature of is examined using coding effects to determine whether it is relevant for musical pretasking, asynchronous, or synchronous applications. Synchronization applications cannot be divided into active (i.e. consciously synchronizing the speed of movement with the music) and passive (i.e. adjusting the tempo of the music in real time via technology).

Finally, the locations (laboratory vs. field) and domains (exercise vs. sport) are coded for moderator analysis. This is because the effects of music in the field environment are likely to be smaller or more diffuse due to other stimuli that may affect participants.

Similarly, in the context of sports, the complexity of the movements involved and the level of human interaction may make benefits smaller or more diffuse. It's more standardized than sports-related tasks.

Music effect mechanisms

Over the past two decades, there has been a steady stream of academic research uncovering the mechanisms underlying the effects of music on movement and sport. This subsection is organized to briefly describe three prominent mechanistic typologies. First, consider using music to regulate or modulate your emotional and emotional state. Second, we examine music as a distraction tool in relation to attentional frames. Third, we consider rhythmic responses to music, focusing on the principles of auditory-motor synchrony and the neural correlates of rhythmic behavior.

Music, Affect, and Emotions

The management or modification of emotional states, the induction of certain emotions, and the control of psychomotor arousal are some of the most commonly mentioned applications of music in exercise and athletics. (e.g., happiness, liveliness, calmness, or aggression). The term "affect" here refers to a neurophysiological state that is cognitively accessible as a straightforward, primal, nonreflective emotion. We refer to experiences that are often fleeting, powerful, and traceable to a specific cause as emotions. Juslin's (2013) theoretical framework proposes eight psychological pathways via which music might change affective and emotional responses. To name a few, the brain stem reflex is the mechanism through which the basic acoustic characteristics of music trigger reactions by informing the listener of a potentially crucial or urgent occurrence. For instance, regardless of how the music is ultimately judged, quick, loud music would inevitably stimulate the listener by engaging the central nervous system. Heart rate, blood pressure, body temperature, skin conductance, and muscular tension are all increased as a result of this stimulation. The opposite is true as well, and slow, mellow music lowers sympathetic arousal. Such calming music frequently imitates the calming sounds of nature, such as mother vocalizations, purring, and cooing. The ability of the musical stimulus to arouse becomes crucial when high levels of psychomotor arousal are desired, such as during high-intensity training sessions. The bio musicological mechanism of rhythmic entrainment is related to this. The rhythmic elements of music are designed to synchronize with the tempo of movement and biological pulses like heart rate and breathing rate. People almost always state that they like the tempo to be quite high when they are working out hard.

Similar to this, music can have a priming effect prior to exercise or as part of an athlete's precompetition routine since brain waves tend to entrain with musical pace. According to Scherer and Zentner (2001), music may have an effect on humans through setting off emotional connections, a process that could be mediated by subcortical systems. According to appraisal theory, a person's subjective assessment of the event is what drives their emotional reactions to music when they are exercising. Juslin's (2013) proposed method of evaluative conditioning, which describes the repetitive matching of a certain piece of music with other favorably or negatively valenced stimuli, is somewhat connected to this idea. For instance, via repetition, a certain song may develop to be closely connected with a particularly enjoyable physical exercise experience. This is a kind of classical conditioning where a previously neutrally valenced conditioned stimulus, like music, learns to elicit the same emotional response as a positively valenced unconditioned stimulus. (i.e., a pleasurable physical activity experience).

Music and Physiological Functioning

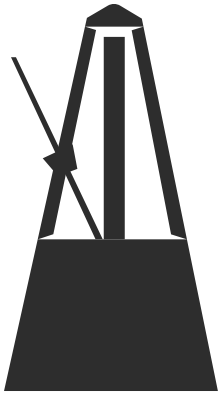
According to the current findings, listening to music while exercising may have a minor but considerable positive impact on how much oxygen is used. This is in line with accumulating data from scientific research showing positive effects of music on respiratory and cardiovascular systems. For instance, Miller et al. (2008) shown that listening to pleasurable music enhanced blood-flow efficiency by 26% whereas listening to music that causes fear decreased it by 6%. Increased oxygen usage would follow from increased blood flow effectiveness. Furthermore, according to Sleight (2013), the positive impacts of music on physiological function seem to arise predominantly from the music's inherent qualities rather than from listeners' preferences. The rhythmical components of music boost the biomechanical or neuromechanical effectiveness of physical movements during exercise, which is a plausible explanation for the effect that has been observed. For instance, jogging to music enhances fluidity and regulates stride patterns, which means that fewer minute alterations to movement patterns are needed, lowering the energy expenditure for a given task. Those impacts, although slight in scale, should logically contribute to enhanced physical performance, especially in repetitive and rhythmic long-duration tasks (e.g., running, cycling, and swimming).

Studies on music have generally used a laboratory environment to examine V O2 as an outcome variable. Given the attentional demands and potentially anxiety-inducing nature of the apparatus needed to take such measures, a laboratory setting can obscure the influence of music even while it provides the level of control and technology necessary for oxygen consumption to be recorded precisely. It is notable that the stated advantages of music were minimal in many research using respiratory analyses. Due to the simplicity of data collection utilizing strap-on monitors, the examination of heart rate has taken place in a wide range of physical activity scenarios. The lack of a widespread effect may be partially explained by the effects of music on the cardiorespiratory system's operation outside from tasks connected to exercise. Fast music can slightly raise heart rate during low-intensity activity whereas slow music can somewhat lower heart rate during moderate-to-vigorous exercise. Moreover, auditory-motor synchrony takes precedence over how biological pulses, like heart rate, entrain to music (i.e., it becomes the dominant form of entrainment). Overall, based on the results of a small number of carefully conducted studies, it appears conceivable that listening to the right music can have a small positive impact on physiological efficiency and improve performance in endurance-type activities.

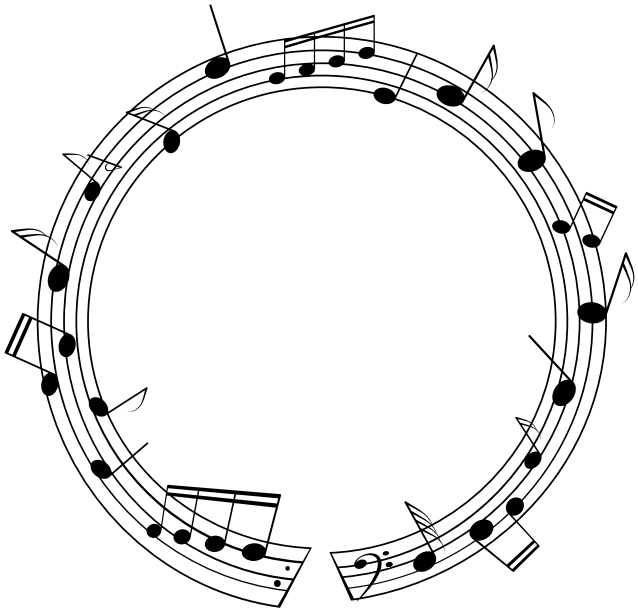
Music and Performance

The effect of music on physical performance is possibly the area in which practitioners, particularly those involved in sports, are most interested. Overall, music had a minor beneficial effect with a minor standard error, indicating a high level of confidence in this finding. Two moderating effects were discovered. For starters, the exercise domain had a greater impact than the sport domain. This was to be expected, given that researchers have more control over participant kinematics during exercise than they do during sports. Well-established motor patterns, coactive tasks, or open environments are frequently used. Exercise tasks have few degrees of freedom, which reduces potential confounds and increases the likelihood of performance benefits. Many of the sport-related studies were conducted in the field, which meant that several of the environmental controls that researchers typically use (e.g., sterile visual surroundings, temperature regulation, social isolation, and no verbal encouragement) could not be used. Sport-related studies have the advantage of shedding light on how music can improve physical performance in ecologically valid settings.

Music tempo emerged as a moderating variable as well. Fast-tempo music produced a greater performance benefit than slow-to-medium tempo music, as expected. North and Hargreaves (2008) emphasized the relationship between a musical work's stimulative properties and the function it serves in various listening situations. Given the high-energy/activation state typically required for optimal performance in exercise or sport, the stronger effect of fast-tempo music reflects our understanding of physiological arousal and musical aesthetics. Notably, many studies did not provide details on music tempi, making both interpretation of findings and replication of studies extremely difficult.



The critical cutoff point for music tempo appears to be 120 bpm, which is twice the resting heart rate of healthy adults, the preferred walking step frequency in humans, a tempo that reflects natural rhythmicity (e.g., while finger tapping), and a seemingly magical number in terms of human activation, according to the music-in-physical-activity literature. This was also the threshold we used to distinguish between slow-to-medium and fast-tempo music. MacDougall and Moore (2005) discovered that 120 bpm was the dominant tempo in an analysis of over 70,000 pieces of modern music from 1960 to 1990. We can assume that human movement and perception are somehow linked to this pace; certainly, deejays often entice people onto a dance floor with music at this identical beat. Although there was no moderating impact for delivery modality, the synchronous application of music had a higher influence on performance than the asynchronous and pretask applications. The bulk of research including pretask music were conducted in sporting situations, where even a minor favorable impact induced by music during the key precompetition phase might be important in terms of performance. Yet, our data show that using music in an exercise or sport training situation, whether synchronously or asynchronously, improves performance. The lack of a difference in performance between synchronous and asynchronous music contradicted prior statements in the literature.



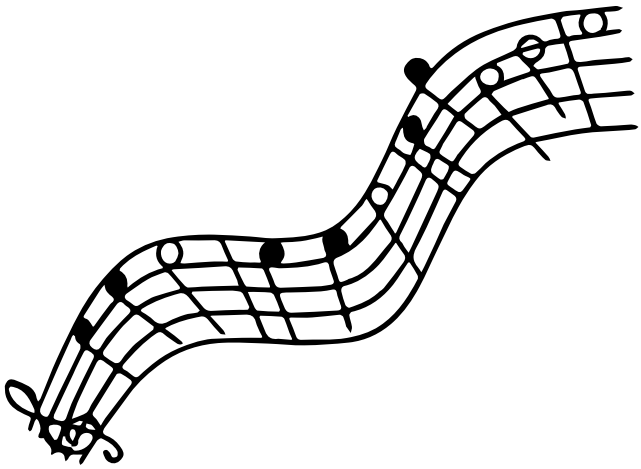
Since Anshel and Marisi (1978) demonstrated the advantages of music synchronized to movement patterns, conventional wisdom has held that synchronous music outperforms asynchronous music in terms of endurance performance. Synchronous music studies are relatively uncommon, possibly due to the significant time and effort required to conduct them. The moderation effect for physical activity intensity was insignificant, but it demonstrated that the performance benefits of music are generally stronger at low-to-moderate intensities than at high intensities.

Music is may be more relevant at low-to-moderate intensities where interoceptive cues do not interfere with cerebral cortex processing. Furthermore, because of the overwhelming influence of physiological load on the body's main pulses, there is less opportunity for the principles of entrainment to take hold at high intensities. In terms of performance benefits, who chose the music had no moderating effect. This is useful in practice because, in many exercise and sport contexts, individual participants' musical preferences cannot be fully accounted for, so an instructor or coach would typically select music with certain participant characteristics (e.g., age and gender) and the nature of the task in mind.

The first conclusion to be drawn from this is that relaxing experimental control does not increase the performance benefits of music. Although participants may be given some degree of choice, perhaps in terms of musical genre, to ensure the scientific integrity of a study, it is often necessary for the researcher(s) to keep other salient musical qualities constant (e.g., tempo, inclusion or exclusion of lyrics, harmonic content, degree of familiarity), and the true purpose of music intervention(s) within the experimental protocol obscured until the post experimental debriefing.

Practical Application of the Findings

Despite the relatively modest scale of music listening's beneficial effects on outcome variables, each one may be of practical importance in exercise and sport environments, and possibly beyond.



The positive effect of music listening on affective valence emphasizes the importance of the current findings for exercise and health professionals. Music interventions can be used to improve negative affective experiences across the entire spectrum of physical activity intensities. Such interventions may be especially beneficial for people who are starting an exercise program after a long period of inactivity. According to research, the negative affective responses experienced by exercise initiators are a significant barrier to continued or habitual participation in physical activity.

The application of the peak-end rule is a relatively novel approach to using music. As some experimental studies have shown, the differentiated use of music can have a powerful effect because it allows practitioners or individual exercisers to place the musical stimulus precisely where its effects are likely to be most pronounced. As a result, rather than using music throughout an exercise session, it could be used in the last half or even last third, when affective decline is most likely to occur. The peak-end rule can be used to your advantage by making the end of a workout more enjoyable through the use of different music.

Although there were no differences in performance between synchronous and asynchronous music, exercisers looking to improve their performance or athletes looking to improve their training regimens may want to consider using auditory-motor synchronization, given the performance benefits reported among the recreationally active and the highly trained. However, in order to reap the benefits of auditory-motor synchronization, exercisers and athletes may require some training in the extraction of a musical beat. Some musical forms, in particular (e.g., hip-hop), are complex in terms of beat extraction due to the widespread use of polyrhythms, in which two or more rhythmic patterns are interwoven.

There is some qualitative evidence for the concept of shared affective motion experience, in which exercisers or athletes sense the rhythm of others moving in time around them and enjoy the sensation of working as a unit. Exercise and sport professionals can use this concept to supplement the experiences of those under their supervision. Activities that are typically done in a group setting, such as stretching, circuit training, and warm-up, can be easily coordinated with musical accompaniment. This promotes important aspects of intrinsically motivated behavior by increasing the sense of fun, enjoyment, and camaraderie.

The enduring popularity of music-inspired group exercise classes (such as Aquarobics, Boxercise, and Zumba) attests to this phenomenon. Close examination of studies in which participants chose their own music to accompany physical tests revealed that some participants made appropriate choices for the activity in which they were engaged, whereas others did not. A common methodological limitation in studies that used self-selected music is that participants received little or no guidance in how to select appropriate music for the situation or task at hand, and thus the psycho-acoustic properties of music differed markedly across participants. Furthermore, as previously stated, studies using self-selected music have a higher likelihood of emergence and experimenter effects. Reiterating briefly the issue of promoting physical activity for its numerous health benefits, previous systematic reviews of the available literature have highlighted the magnitude of the challenge. Interventions designed to promote physical activity among older adults, for example, have limited effectiveness, with small effects typically reported. Similarly, interventions to increase physical activity levels in children and adolescents are often ineffective, and those that are effective typically include multiple components. The significant benefits of music that we identify suggest that incorporating music into a health promotion strategy to supplement other elements may have the potential to increase the efficacy of such strategies in the long run.

Our findings suggest that music could be used in a variety of sports. Music can clearly provide a small beneficial influence across the outcome variable set during the precompetition phase. Music can be used to change the valence of affect, promote specific emotional responses, and regulate the level of psychomotor arousal. Athletes in training may use music to reduce RPE (Rating of Perceived Exertion) even at relatively high work intensities. Both synchronous and asynchronous music applications have been linked to increased efficiency in repetitive motor tasks, but consideration of individual movement patterns, such as stride rate, is advantageous for synchronous music applications. The use of recuperative music in sport is relatively untapped, leaving significant room for structured music use in both active and static recovery phases.

Few Best Exercises for Seniors (and a Few to Avoid!):

Exercise and nutrition are essential components of a healthy lifestyle throughout life, and our needs are constantly changing as we age. A growing body of research shows how important regular exercise is for older people and why many older people choose active rather than sedentary lifestyles. Bellow you can see the benefits of exercise for seniors, the 7 best exercises for seniors, and some exercises that can harm seniors' health.

Our biology changes as we age, so older people will stay in shape for different reasons than younger generations. The health benefits of doing so are more pronounced. Doctors and researchers say older people should stay as active as possible without overdoing it. For older people, exercise can help them live longer, healthier, and happier lives.

Some of the benefits of exercising later in life include:

- **More exercise means independence for older people:**

Older people who exercise regularly are less dependent on others. According to Harvard Medical School, regular exercise improves the ability of older people to walk, bathe, cook, eat, dress, and use the toilet. When independence is a priority, exercise is one of the best ways for older people to maintain independence.

- **Regular exercise means more energy:**

It may seem counterintuitive, but inactivity makes you tired and activity gives you more energy. Many exercises promote the release of endorphins, essential neurotransmitters associated with pain relief and health. Endorphins fight stress hormones, promote healthy sleep, and make you feel more alive and energetic overall.

- **Regular exercise improves brain function:**

One of the most notable advances in health science has been the discovery that the mind and body are more closely connected. A healthy body likely means a healthy mind, and older people who exercise regularly have improved cognitive health, according to a study from the National Center for Biotechnology Information. A recent study by the Alzheimer's Research & Prevention Foundation showed that regular exercise reduced the risk of developing Alzheimer's disease and dementia by almost 50%.

- **Exercise helps prevent and fight disease.**

Heart disease, osteoporosis, depression, and diabetes are common and often fatal diseases in older people. Luckily, a more active lifestyle can help prevent these ailments or alleviate the unpleasant symptoms of these ailments if you already have them. If you have, exercise is key to avoiding discomfort.

- **Exercise improves balance in older people:**

Falls are a much bigger problem for older people than for younger people. According to the American Council on Aging, every 11 seconds a senior is admitted to the emergency room with a fall-related injury, and every 19 minutes a senior dies from a fall. No two falls are the same for him, and avoiding falls is complicated, but regular exercise reduces his chances of falling by 23%.

The Best Exercises for Seniors:

Exercise is important for older people, but knowing where to start can be difficult. If you haven't exercised in a while, it can be difficult to get back into the active world. It's also quite possible that the exercises you're used to are not ideal for older people.

Before starting any exercise program, it is important to check with your doctor that you are healthy enough to exercise and find out which exercise is best for your current fitness level.

- Water aerobics

In recent years, water aerobics has become a very popular form of exercise among all age groups, especially the elderly. Great for people with other joint pains. Additionally, water provides natural resistance, making weights unnecessary for strength training. Aqua gym exercises improve strength, flexibility and balance while minimizing strain on the body.

Great water aerobics exercises for seniors include:

- Aqua jogging
- Leg lifts
- Standing water push-ups
- Flutter kicking
- Arm curls

- Walking

One of the least stressful and most accessible exercises is walking. Walking is more difficult for some seniors than others, so distance and step goals vary from person to person. For the general population, 10,000 steps a day is recommended for a healthy lifestyle. People who have difficulty walking or have joint pain can target a lower number. A PLOS One study found that walking 10,000 steps lowered mortality rate by 46% over 10 years. Walking promotes a healthy lifestyle while strengthening muscles and reducing the risk of heart disease, stroke, diabetes and colon cancer.

Ideas for walking exercises for seniors:

- Walk the perimeter of a familiar building
- Find a moderate trail through a park
- Find an audiobook or a playlist for stimulation during your walk
- Find a walk-friendly race to train for

- Chair yoga

Like water aerobics, chair yoga is a low-impact form of exercise that improves muscle strength, mobility, balance, and flexibility, all of which are important aspects for seniors. Chair yoga is an accessible form of yoga that puts less strain on muscles, joints, and bones than conventional forms of yoga.
As a bonus, chair yoga has been shown to improve mental health in older adults. People who regularly practice yoga in the chair have more quality sleep, fewer cases of depression, and report an overall sense of well-being.

Great chair yoga exercises for seniors include:
- Overhead stretch
- Seated cat stretch
- Seated cow stretch
- Seated twist
- Seated mountain pose

- Pilates

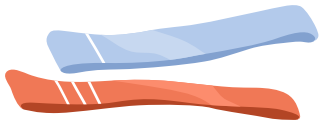
Pilates is a popular form of low-impact exercise that was developed a century ago. In pilates exercises, breathing, alignment, center of gravity, and core strength are emphasized, and often involve mats, pilates balls, and other props to help build strength without straining straight for high impact exercises. Pilates has been shown to improve balance, build core strength, and increase flexibility in older adults.

Some great pilates exercises for older adults include:
- Side circles
- Leg circle
- Food slides
- Mermaid movement
- Step ups

- Resistance band workouts

Resistance bands are elastic rubber bands that increase resistance during exercise while reducing stress on your body. Resistance band exercises are beginner-friendly and accessible. This form of exercise is becoming increasingly popular among older adults due to the relatively cheap upfront cost of materials, making resistance band training ideal for home workouts. Additionally, these exercises are great for strengthening your core, helping to improve posture, mobility, and balance.

Resistance band workouts for seniors include:
- Triceps press
- Leg press
- Bicep curl
- Band pull apart
- Lateral raise



- Dumbbell strength training

Strength training has been shown to reduce symptoms of diabetes, osteoporosis, back pain and depression, and help you manage your weight. Strength training also contributes to a higher metabolism and better blood sugar control. Weight training is one of the best ways for older adults to stay fit, if done with the right precautions. Dumbbells allow seniors to isolate muscle groups to increase strength, while improving balance and flexibility.

Some ideal dumbbell workouts for seniors include:
- Front raise
- Bicep curl
- Tricep extension
- Overhead press
- Bent-over row

- Body weight workouts

Muscle wasting can be devastating and debilitating for older adults. Approximately one-third of older adults have severe muscle atrophy, which can lead to hormonal problems, decreased ability to metabolize protein, and other problems. There is a nature. Bodyweight training is one of the best ways to counteract the effects of muscle atrophy in older people. One of the main advantages of bodyweight training is its affordability. The materials required for bodyweight training are minimal. Most bodyweight workouts require workout clothes and a mat to cushion your floor.

Some great body weight workouts for seniors include:
- Bird dog
- Stepup
- Side lying circles
- Lying hip bridges
- Squats to chair

Exercises Seniors Should Avoid

A good percentage of popular exercises aren't ideal for older adults. These popular exercises are great for young people looking to gain or lose weight quickly, but they can put a lot of pressure on older adults with joint pain, muscle atrophy, posture problems or mental health problems.

The following exercises should probably be avoided if you are over 65:
- Bench press
- Deadlift
- Long-distance running
- Leg press
- Upright row
- Abdominal crunches
- High-intensity interval training
- Power clean
- Rock climbing
- Squats with dumbbells or weights

Conclusions

Given the summative evidence in the research literature supporting music listening for exercise and sport across a variety of outcome variables, it is reasonable to conclude that music has the potential to provide significant positive effects for exercisers and athletes, particularly in terms of enhanced affective responses and improved physical performance, but also in terms of reduced perceived exertion and more efficient oxygen utilization. Such effects, however, are not unavoidable. It is critical to avoid the kinds of wild extrapolations that followed research showing that listening to a Mozart sonata was associated with improved spatial temporal reasoning as measured by the Stanford-Binet IQ test. These findings led, among other things, to Georgia allocating a sizable annual budget in 1998 to fund the distribution of a classical music CD to every child in the state. A subsequent analysis of the so-called Mozart effect revealed that any cognitive enhancement was minor, transient, and did not indicate any long-term change in general reasoning ability or IQ. Although the current findings represent a solid evidence base, keep in mind that the benefits of listening to music before or during physical activity are not guaranteed. For example, while pretask music is widely used by athletes, many of whom attest to its benefits, our findings indicate that the benefits to performance are likely to be minor, if still significant.

Indeed, almost all of the benefits associated with music listening in exercise and sport are likely to be minor in magnitude and may be limited to feeling better and perceiving less exertion, though the potential for genuine improvements to physiological efficiency and physical performance remains a possibility, and we recognize that any gains of this nature may prove extremely valuable for athletes involved in activities where the margins of success and failure are narrow. A clear goal for practitioners is to use music-related interventions to improve affect and enjoyment during exercise in order to increase adherence among previously inactive people. The central challenge for researchers and practitioners is not to speculate about whether music has the potential to benefit exercisers and athletes, because it clearly does, but to clarify how to use it optimally.

Part II

WORK CARD 1

There are a few things that most gym members always take with them when heading to a workout. Water bottle, towel, suitable shoes and headphones. For many gym members, headphones are the most important part of their workout. Without them, they might not even be able to train, and 2 in 3 of her will interrupt or skip a workout if they don't have headphones.
As you can see, music is an integral part of most people's fitness routines. If someone forgets their water bottle, they'll probably continue their workout, but if they forget their headphones, they quickly turn around, grab it, and go out to work out. Music is very important to people. But it's also a good thing.

It's fun and exciting, but it also has a big impact on your workout. Research shows it has the power to enhance your workouts... right! Just listening to music will improve your performance at the gym. Even if you don't bring your own headphones, most of the on-site gyms have their own play.

EXERCISE NR 1

You should understand the importance of a good workout playlist. In the gyms they have their own music, but it is encouraging to bring your own headphones and listen to whatever you like so you can experience the benefits of fitness!

Please write bellow how you feel when you are doing sports and listening music? You have 5 mins. After discuss with you teammates.

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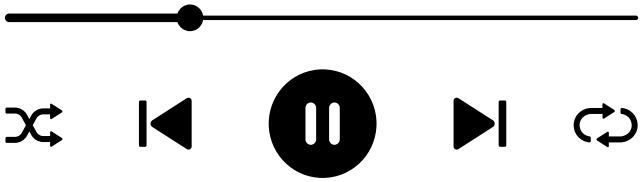

WORK CARD 2

Some experts believe that music acts as a distraction. Distractors are known to reduce pain levels, so you are less likely to notice pain during exercise. People who don't listen to music may perceive the intensity of exercise more intensely and may feel tired and sore during exercise. I don't feel any discomfort or burden.

In The Social and Applied Psychology of Music, North and Hargreaves propose that music provides competing stimuli to distract from the pain endured during exercise. It's easier to forget or ignore pain and fatigue when you're distracted by the song.

However, there are many other ways music can affect your workout.

EXERCISE NR 2

Do one workout without music and next one with music.
Please answer these questions bellow:
Do you feel the difference?
Did you managed to do longer and better training with music?
You have 5 mins. After discuss with you teammates.

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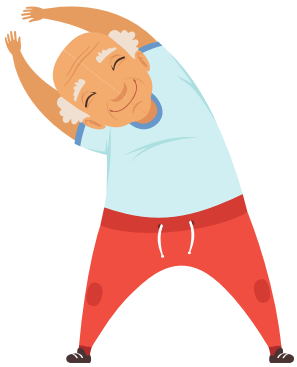


WORK CARD 3

Several studies have shown that listening to music improves athletic performance by increasing the distance you run, the pace of movement, and the number of repetitions.

A study by the University of Toronto looked at 34 of her cardiac rehabilitation patients after a prescribed training program. Researchers divided them into three groups:

One with no music, one with a personalized playlist, and one with a playlist specially curated to improve tempo and tempo synchronization using rhythmic auditory stimulation (RAS). It's a thing. The group listening to RAS music felt less energetic, but had increased workout endurance, intensity, and duration compared to the other two groups.

Another study found that people who listened to music on a treadmill increased their pace and covered the distance without feeling tired.

EXERCISENR 3

Ask participants to do some workout. First they need to exercise without any music for 3 mins. After 3 mins exercising switch on music personalized playlist. After 3 mins more exercising switch on music playlist specially curated to improve tempo and tempo synchronization using rhythmic auditory stimulation.
Let each participant write down how he had feel exercising:
Without any music

.....

.....

With music personalized playlist

.....

.....

With music playlist specially curated to improve tempo and tempo synchronization using rhythmic auditory stimulation

.....

.....

WORK CARD 4

As mentioned earlier, listening to music while exercising can reduce physical fatigue. A 2010 study found that music not only enhances work performance, but can also delay the onset of fatigue. In addition, it's a great distraction to get rid of the fatigue and pain you're feeling.

EXERCISE NR 4

Divide the group in couples and ask them to dance for 5 minutes without any music.

After this make a break for 3 minutes.

Divide the group in couples and ask them to dance for 5 minutes with appropriate music.

Ask each participant to write down answers of the following questions listed below:

How they felt dancing without music?

.....

.....

How the felt dancing with dance appropriate music?

.....

.....

Does the fatigue decrease when you dance the second time?

.....

.....

WORK CARD 5

Your body has a natural way of syncing up with the beat of a song. The faster and more energetic the song, the more likely the tempo will be the same. Music stimulates the parts of the brain that control movement, allowing the body to perform repetitive movements more efficiently.

This synchronization improves heart rate, metabolism, energy efficiency, reduces blood pressure and physical and mental stress. Also, you will feel less tired. Various studies have shown that certain tempos lead to the best performance of certain exercises. For example, a 2011 study found that the ideal pace for best cycling performance is 125-140 bpm (determined by measuring intensity using heart rate). A similar 2014 study of his looked for his highest BPM on the treadmill and found that music between 123 and 131 BPM yielded the best performance.

Experts agree that the ideal tempo for maximum results is 120-140 bpm. However, slow music is best for slow, relaxing activities (such as yoga).

EXERCISE NR 5

Ask participants to do some yoga (stretching exercises). In the first 2 minutes switch one fast and more energetic music like The Four Seasons, Concerto No. 2 in G Minor by Vivaldi. After this switch one slow and calm music like Wolfgang Amadeus Mozart: Clarinet Concerto in A major.

Make a group discussion. Below is a list with questions that can be used:

- Ask participants how they fell doing yoga (stretching exercises)?
- Did they feel their body differently with the and the different music?
- Which music they like during the yoga exercises and why?
- How they felt their bpm during the yoga exercises listening fast and more energetic music vs slow and calm music?
- Which music they prefer for yoga exercises?

WORK CARD 6

One of the greatest benefits of music (and not just exercise) is that it improves your mood. When you listen to music, your body releases feel-good hormones (dopamine, oxytocin, etc.). It also lowers levels of cortisol (the body's stress hormone). As these levels drop, so does stress. Let go of negative thoughts and move to a more positive state of mind. Exercise also releases feel-good hormones that improve your mood, so exercising while listening to music is a great way to boost your mood.

EXERCISE NR 6

Make a play list with the following music:

1. Ave Maria, CG 89a (relaxing music);
2. Explosion sound;
3. Carmina Burana (fast music);
4. Car accident sound
5. Bolero (Ravel);
6. Thunder storm.

Switch on the play list, let each track to be listen for 1 minute. Show after participants the name of each track in the music set. Ask them to express their emotions about each track and overall experience from the exercise.

WORK CARD 7

Like fatigue, music can help overcome pain. It acts as a distraction and distracts from pain as well as fatigue. Not only that, but it also helps in relieving pain. As we mentioned earlier, listening to music releases your body's natural mood-enhancing hormones and opioids. These hormones not only improve mood, but can also reduce pain. These hormones increase your pain tolerance, allowing you to endure more during your workout. Interacting with music (for example, synchronizing your movements to the beat) increases opioid signals and enhances analgesic properties.

As you can see, there's a reason music has become such an integral part of exercise. It helps motivate people to work harder while providing a myriad of benefits.

EXERCISE NR 7

Ask participants to dance Bulgarian national dance- Rachenitsa for 10 minutes with the national music for this dance. It is a fast national dance.

- Make a discussion with the participants after the dance on the following questions:
- How you feel before and after the dance?
- Do you like the dance and the music?
- Do you think that the music helped you to dance this fast dance?
- Do agree that the music helped you to overcome pain and fatigue during the dance?

WORK CARD 8

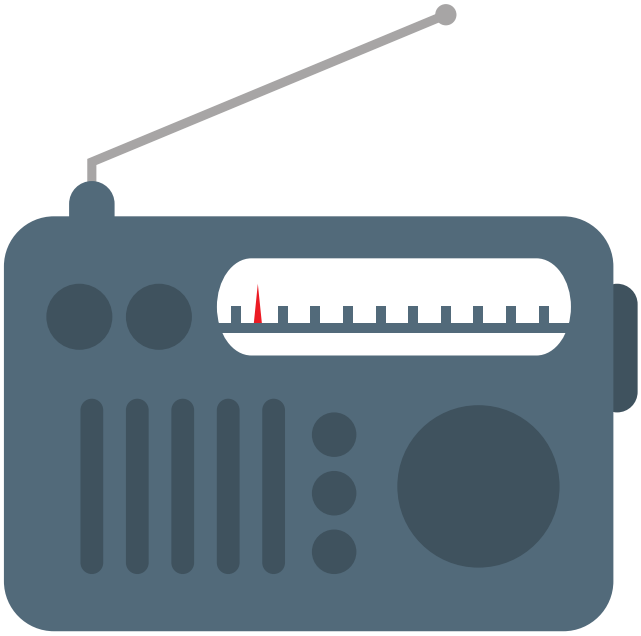
Music and art can enrich the lives of people with Alzheimer's disease. Both allow self-expression and engagement even after advanced dementia.
Music is power. Studies have shown that music reduces restlessness and improves behavioural problems common in the middle stages of Alzheimer's disease. You may be able to sing the lyrics of songs from your time. Even when verbal communication becomes difficult, music provides a way to connect.
Use the following tips when choosing music for people with dementia.

- Identify music that is familiar and enjoyable to the person. If possible, let the person choose the music.
- Choose music sources that are not interrupted by distracting commercials.
- Use music to set the mood you want. For example, gentle music can help create a calming environment, while faster songs from someone's childhood can lift the spirits and evoke pleasant memories.
- Encourage movement (clapping, dancing) to increase fun.
- Avoid sensory overload. Close windows and doors and turn off TVs to eliminate competing noises. Make sure the music volume is not too loud.

EXERCISE NR 8

Switch on familiar song from the childhood years of your participants.
Make a group discussion with the following questions:

- Do they like the song?
- Ask them how they feel after the song?
- What memories appear when they are singing it?



WORK CARD 9

A common practice in pensioners' clubs in Bulgaria is for pensioners to dance Bulgarian folk dances once a week. Bulgarian folk dances are known for their healing effect. Different dances, accompanied by a characteristic melody, have a beneficial effect on various diseases.

EXERCISE NR 9

Suggest that your adult learners follow the example of the Bulgarian pensioners and dance Bulgarian folk dances once every week. Play them video tutorials from various online platforms. After a few weeks, ask each of your trainees for feedback. Sample questions follow below:

- Do you like to dance Bulgarian folk dances?
- Which dance did you like best and why?
- How does dancing make you feel?
- Did your emotional and physical state improve after dancing and listening to Bulgarian folk music?

WORK CARD 10

Adults over the age of 65 should have at least 150 minutes of moderate-intensity exercise per week (e.g., 30 minutes per day, 5 days per week), such like walk briskly, or they should do 75 minutes a week of strenuous activity like walking, jogging or running.

EXERCISE NR 10

Ask your participants to do 150 minutes of moderate-intensity exercise- brisk walk. Next week ask them to do the same brisk walk but with headphones listening intense and energetic music.
After these two weeks let each of the adult learners made a self-reflection and fill the questionnaire bellow:

- How I feel to have a brisk walk?
- How I feel to have a brisk walk while I am listening intense and energetic music?
- Which is better for me to walk with or without music?

IV End of the workshop (20 MIN.)

The facilitator asks the participants to sit in a circle and each answer the question:

- *What did you like the most about today's workshops?*
- *What will you take for yourself?*
- *What surprised you the most and caught your attention?*
- *How did the workshops affect you?*
- *What things are you going to change in your behavior?*

After the participants have finished speaking, the facilitator would like to thank you for your participation in workshops and the teacher asks you to fill in evaluation questionnaires.
After taking the questionnaires, the teacher will distribute the diplomas.

V EVALUATION QUESTIONNAIRE

DEAR PARTICIPANT,
WE HOPE THAT YOU'VE FOUND THE WORKSHOPS INTERESTING AND FOUND OUT MANY THINGS.
WE REALLY APPRECIATE RECEIVING FEEDBACK, SO WE WILL BE VERY GRATEFUL FOR THE TIME AND COMPLETION OF THE BELOW QUESTIONNAIRE.

THE QUESTIONNAIRE IS ANONYMOUS.

1. DID THE WORKSHOPS PROVIDE YOU WITH USEFUL TIPS AND TECHNIQUES RELATED TO PHYSICAL ACTIVITY USING CREATIVE METHODS?

YES NO MAYBE

2. DID THE WORKSHOPS PROVIDE YOU WITH USEFUL TIPS AND TECHNIQUES FOR TAKING CARE OF YOUR OWN HEALTH AND PHYSICAL FITNESS?

YES NO MAYBE

3. DID THE WORKSHOP PROVIDE YOU WITH KNOWLEDGE ON MUSICAL RELAXATION?

YES NO MAYBE

4. WHICH PART OF THE WORKSHOP DID YOU LIKE THE MOST AND WHY?

.....

.....

5. WOULD YOU LIKE TO TAKE PART IN OTHER WORKSHOPS?

YES NO

6. IF YES, PLEASE LIST THE TOPICS THAT WOULD BE INTERESTING FOR YOU.

.....

.....

7. SHARE YOUR REFLECTION AND COMMENTS

.....

.....

THANK YOU FOR YOUR CONTRIBUTION.

Develop Your Creativity

CERTIFICATE

IT IS CONFIRMED THAT

.....

(FULL NAME)

TOOK PART IN THE WORKSHOP

''MUSICAL MOVEMENT - INCL. PHYSICAL ACTIVITY WITH THE USE OF ENERGIZING MUSIC THAT WILL AWAKEN ENERGY IN ADULTS AND ENCOURAGE THEM TO TAKE CARE OF THEIR OWN HEALTH AND PHYSICAL FITNESS''

DEVELOP YOUR CREATIVITY
ERASMUS PROJECT NO. 2020-1-PL01-KA227-ADU-095783

WORKSHOP FACILITATOR:

PLACE :

DATE:

Co-funded by the European Union