

Andrews University
School of Business Administration and Management

Research Paper
On

Effectiveness of Exercising with Music.

Presented to:

Prof. Jerry Chi, Associate Dean
MBA/MSA Graduate Program Director
Tenured Professor of Management

Presented by:

Geetha Raj Choppala, ID: 231889
MBA in Health Care Administration

Presented on:

October 20, 2022

Effectiveness of Exercising with Music.

Abstract

Several research has been made by many psychologists and health professionals around the world about exercising and listening to music for meditation and relaxation. Everyone regardless of what age group, surely are aware and have knowledge regarding the health benefits associated with exercise and have a general interest in listening to good music while they drive or when they cook in the house just to have some fun twist to what they are doing so they don't feel bored. So here we are trying to see how both exercise and music work together whether they have more health benefits than usual since most people feel excited, joyful, stressless or even motivated with music. And people who have religious belief would feel more empowered when they listen to their spiritual music with meaningful lyrics which will inspire them in different ways. Sometimes exercising silently can make you feel like a burden to workout but with music you can feel encouraged. People often listen to music simply because their work feels lighter and more pleasurable with music than like a tiring duty, but they seldom realize how many benefits are associated to this pairing of music of our choice with exercise. Exercise not only maintains our outward appearance by keeping our physical body fit, toned and slim. It also helps in the physiology of human body where it stimulates almost all the organs inside our body and promotes good metabolism, digestion, excretion and even detoxifies. On the other hand, music plays an excellent role in relaxing our muscles and by activating our brain cells in releasing happy hormones like adrenaline and serotonin that keep us joyful and positive which will obviously improve our overall health. Since health is not defined as not having a disease but it involves a complete well-being of a person physically, psychologically, emotionally, socially, and spiritually as defined by WHO.

Our aim here is to bring about a change in the lifestyle of people so they can live a peaceful and harmonious lives regardless of what painful situations they may be going through because life is a gift of God and our body is the temple of God so we have to be happy in ourselves and keep our bodies functioning well just as they have been created so wonderfully by our creator God almighty.

Introduction

There are several reasons why a person would like to exercise. Some want to maintain body structure while others want to have good health. No matter what the reason is exercise is a good thing, just like how an engine gets damaged when not used for a while similarly human bodies are created in such a way that we must keep moving and make sure our organs stay healthy and not worn out. Many research studies show that exercise not only has good effects on the physical functioning of the body but also has major effect on the mind, emotions, and psychological well-being of a person. Being healthy does not mean a person has no disease.

A person can be called healthy when he is doing good physically, mentally, socially, and psychologically. To maintain this, we must make sure we follow and live a healthy lifestyle. These days people are exercising, doing household chores like cooking, cleaning and even gardening with the music turned on. It has become the latest trend that everyone wants to do things with music playing in the background. Though the choice of what kind of music totally depends on their individual preferences, everyone seems to be enjoying this idea. Our research here basically wants to check in how many ways are people being benefited by exercising with the music on. Hence, to determine if those effects are good or bad. Several research have been conducted and noted that music with exercise generally has positive effects on the body. Music helps to relax our mind while exercise helps to tone our body. Hence both together help us stick to our workout routine by making it more fun filled and energetic instead of silent boring duty. We will never know the time when we listen to our favorite music so in that way we can exercise more and not be distracted with body pains. Pleasant music is good when we do walk or yoga as it calms the mind while beats are good when we do gym exercises so it would be motivating for the individuals. Some exercises like aerobics or dancing surely require music and some sports like bicycle riding should be thought with caution.

Research Problem

Exercise feels like an additional burden and not being motivated enough to take time for workout amidst a busy day's schedule.

Research Question

Does music really help in increasing the endurance level during workouts? How effective is it?

Research Purpose

To learn whether music during workout really effects the body or not. If it does, then to understand how it effects the human mind, body, and spirit. By this research, we can analyze the actual relationship that exists between music and exercise in promoting a person's well-being. Exercise itself helps our body in many ways like to reduce weight, to stay fit, and to maintain good health. A well-toned body helps individuals gain confidence along with other health related benefits as reducing susceptible risks associated with obesity and inactiveness. Exercise along with music is believed to provide even more advantages by many people around the globe as it has positive effects on physical, psychological, and emotional health of a person. Music with exercise gives a total brain workout by reducing stress and anxiety. It also helps in improving the memory, alertness, emotional stability by motivating good thinking and it enhances mood thus providing peaceful sleep. Overall exercising with music aids in promoting better quality of life.

Benefits of exercise with music

1. You will work harder than usual with music on compared to silent gym.
2. It can help you not think about all the aches and body pains associated with exercise since music distracts your mind as you work out.
3. Working out with good music can make you feel happy and joyful as it releases serotonin and dopamine.
4. Exercise helps to boost your immunity naturally, while music relaxes your body.
5. To helps to reduce your anxiety and relieve stress during the work out and even after your workout.
6. You will learn to stay focused and can concentrate well as you will feel refreshed after a pleasant workout.
7. Some music lyrics can motivate and inspire individuals as they gain self-confidence.
8. When you work out with your favorite music time just flies.
9. With music you are not only working out for your body, but you are also giving work to your brain.
10. Religious music even uplifts a person spiritually.

Problems of exercise with music

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The method used to collect information is websites, articles, and journals from the internet with the hypothetical data of 30 responses for 15 questions and 3 subsets. The three subsets included are how music with exercise effects our human body physically, psychologically, and emotionally. The reactions were collected from people with how they felt with music and workout together with their bodily reactions and release of happy hormones that help our bodies in overall well-being.

These are collected using the google survey forms to collect all information based on this research topic among peers. Some information is gathered by personal experience regarding the effectiveness of music in workouts that people felt a kind of ease and happiness while they felt bored and burdensome without the music and appeared less encouraged to do exercise.

Instrumentation and Measures

Description of Instrument Developed – Described your Applied Instrument or Own Instrument.

Reliability (Cronbach Alpha for Each Cluster)

Validity (Construct Validity with Expert Review)

Latent Concept: Reaction Time for happiness and motivation to do exercise regularly.
(Measured by Machine or Perception)

Observed Variable 1: my body symptoms (Machine or Perception)

Observed Variable 2: my body symptoms (Machine or Perception)

Observed Variable 3: my body symptoms (Machine or Perception)

Results

The result of this research work is expected to help us understand and realize how music really empowers and helps to increase the endurance level during workout. The results showed that music is highly influencing and beneficial when applied to workout sessions as it made the sessions energetic, and more fun filled than the regular boring workout time. People informed that music made them feel so motivated to do the exercise without being lazy and helped them improve their day-to-day activities since they felt refreshing and relaxed with good music.

Limitations

This research is simple and is useful to have knowledge about how beneficial music is when we do workout. Working out without music can be boring and time consuming to take time every day but working out with music makes us motivated and encouraged so we don't feel distracted and stayed focused. But it lacks full details as what kind of music is good and what kind of tempo is sufficient for a certain type of workout. I.e., what is good for cardio or what is effective for jogging and what helps aerobics. So this research lack more in depth knowledge about the topic.

Future Research Scope

This research can be elaborated and extended by including the type of music for each workout session along with how it benefits specific workout and to what extent.

Survey Instrument

https://docs.google.com/forms/d/e/1FAIpQLSeV-Q-tRbFmlbq_RJGhWADT9vN5d9VB7gTSsHFfsYj4AuAFz9w/viewform?usp=sf_link

Google form that includes 15 questions that are subdivided into 3 subsets of how exercise with music effects the human body physically, psychologically, and emotionally. We have taken 14 participants in which 7 are control group that exercised without any music while the experimental group 7 members exercised with the music. By this small experiment we can understand members of each group felt both in body and mind. We have seen that people in the experimental group explained that they have experienced joyfulness and good inspiration with the music while the control group did not show provide any noted differences while few informed, they felt bored. So, in conclusion we understand that music does inspire some especially younger adults and they mentioned they were feeling excited and not like doing some work while for some music or without music doesn't really matter if they get their days exercise done. But most people who were involved in this process accepted that music is a great way of making the work more interesting and fun filled.

Conclusion

To conclude, this research suggests that it is an excellent idea to pair your workout sessions with good music so that we feel less tensed, more relaxed, encouraged, and motivated instead of being lazy to workout. Since exercise is the best way to keep oneself going doing it with music regenerates our mind along with toning our body. At the same time, we have to keep in mind to be cautious while selecting the environment specially while jogging to be sure that music doesn't affect us in any negative way like loss of balance or control. Overall exercising with music is highly beneficial and provides double benefit to our body in both physical and psychological health.

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Institutional Review Board**
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Andrews University, Berrien Springs, MI 49104-0355

APPLICATION FOR APPROVAL OF HUMAN SUBJECTS RESEARCH

Please complete this application as thoroughly as possible. Your application will be reviewed by a committee of Andrews University IRB, and if approved it will be for one year. Beyond the one year you will be required to submit a continuation request. It is the IRB's responsibility to assign the level of review: Exempt, Expedited or Full. It is your responsibility to accurately complete the form and provide the required documents. Should your application fall into the exempt status, you should expect a response from the IRB office within 2 weeks; Expedited within 2 weeks and a Full review 4-6 weeks.

Please complete the following application:

1. Research Project	
Title: Effectiveness of Exercising with Music.	
Will the research be conducted on the AU campus? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, please indicate the location(s) of the study and attach an institutional consent letter that references the researcher's study.	

a) What is the source of funding (please check all that apply)	
<input checked="" type="checkbox"/> Unfunded	
<input type="checkbox"/> Internal Funding	Source:
<input type="checkbox"/> External Funding	Sponsor/Source:
Grant title:	Award # / Charging String:
<i>If you do not know the funding/grant information, please obtain it from your department</i>	
2. Principal Investigator (PI)	
First Name: Geetha Raj	Last Name: Choppala
Telephone: 269-759-5473	E-mail: geetha@andrews.edu
<input checked="" type="checkbox"/> Yes I am a student. If so, please provide information about your faculty advisor below.	
First Name: Jerry	Last Name: Chi
Telephone: 817-648-5416	E-mail: jerry@andrews.edu
Advisor's signature:	
Department: School of Business Care)	Program: MBA (Health Care)
3. Co-investigators (Please list their names and contact information below)	
First Name:	Last Name:
Telephone:	E-mail:
First Name:	Last Name:
Telephone:	E-mail:

First Name:	Last Name:	Telephone:	E-mail:
First Name:	Last Name:	Telephone:	E-mail:
4. Cooperating Institutions			
Is this research being done in cooperation with any institutions, individuals or organizations not affiliated with AU? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, please provide the names and contact information of authorized officials below.			
Name of Organization:		Address:	
First Name:	Last Name:	Telephone:	E-mail:
First Name:	Last Name:	Telephone:	E-mail:
Have you received IRB approval from another institution for this study? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, please attach a copy of the IRB approval.			
5. Participant Recruitment			
Describe how participant recruitment will be performed. Include how and by whom potential participants are introduced to the study (<i>please check all below that apply</i>)			
<input type="checkbox"/> AU directory <input type="checkbox"/> Postings, Flyers <input type="checkbox"/> Radio, TV			
<input checked="" type="checkbox"/> E-mail solicitation. Indicate how the email addresses are obtained: Voluntarily from a target audience.			
<input type="checkbox"/> Web-based solicitation			
<input type="checkbox"/> Participant Pool. Specify what pool:			
<input type="checkbox"/> Other, please specify:			
<i>Please attach any recruiting materials you plan to use and the text of e-mail or web-based solicitations you will use.</i>			
6. Participant Compensation and Costs			
Are participants to be compensated for the study? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, what is the amount, type and source of funds?			
Amount:	Source:	Type:	
Will participants who are students be offered class credit? <input type="checkbox"/> Yes, <input checked="" type="checkbox"/> No <input type="checkbox"/> NA			
Are other inducements planned to recruit participants? <input type="checkbox"/> Yes, <input checked="" type="checkbox"/> No If yes, please describe.			
Are there any costs to participants? <input type="checkbox"/> Yes, <input checked="" type="checkbox"/> No If yes, please explain.			
7. Confidentiality and Data Security			
Will personal identifiers be collected? <input type="checkbox"/> Yes, <input checked="" type="checkbox"/> No		Will identifiers be translated to a code? <input type="checkbox"/> Yes, <input checked="" type="checkbox"/> No	
Will recordings be made (audio, video)? <input type="checkbox"/> Yes, <input checked="" type="checkbox"/> No If yes, please describe.			
Who will have access to data (survey, questionnaires, recordings, interview records, etc.)? Please list below. Geetha raj choppable, MBA student Andrews.			
8. Conflict of Interest			
Do you (or any individual who is associated with or responsible for the design, the conduct of or the reporting of this research) have an economic or financial interest in, or act as an officer or director for, any outside entity whose interests could reasonably appear to be affected by this research project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please provide detailed information to permit the IRB to determine if such involvement should be disclosed to potential research subjects.			

9. Results			
To whom will you present results (highlight all that apply)			

Class ___ Conference ___ Published Article ___ Other If other, please specify:

10. Description of Research Subjects

If human subjects are involved, please highlight all that apply:

___ Minors (under 18 years) ___ Prison inmates ___ Mentally impaired ___ Physically disabled
___ Institutionalized residents ___ Anyone unable to make informed decisions about participation
___ Vulnerable or at-risk groups, e.g., poverty, pregnant women, substance abuse population

11. Risks

Are there any potential damage or adverse consequences to researcher, participants, or environment? These include physical, psychological, social, or spiritual risks whether as part of the protocol or a remote possibility.

Please highlight all that apply (Type of risk):

___ Physical harm ___ Psychological harm ___ Social harm ___ Spiritual harm

12. Content Sensitivity

Does your research address culturally or morally sensitive issues? ___ Yes No If yes, please describe:

13. Please provide (type in or copy - paste or attach) the following documentation in the boxes below:

Protocol:

1. Date: 20/9/2022
2. Study Title: Effectiveness of Exercising with Music.
3. Principal Investigator: Geetha Raj Choppala, MBA Student.
4. Department: Andrews University, School of Business Administration (SBA)
5. Other Investigator: NA
6. Project Period: 20/9/2022 to 24/9/2022
7. Funding Agency: NA
8. Amount Requested from Funding Agency: NA
9. Due Date for Funding: NA

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relaxation. Everyone regardless of what age group, surely are aware and have knowledge regarding the health benefits associated with exercise and have a general interest in listening to good music while they drive or when they cook in the house just to have some fun twist to what they are doing so they don't feel bored. So here we are trying to see how both exercise and music work together whether they have more health benefits than usual since most people feel excited, joyful, stressless or even motivated with music. And people who have religious belief would feel more empowered when they listen to their spiritual music with meaningful lyrics which will inspire them in different ways. Sometimes exercising silently can make you feel like a burden to workout but with music you can feel encouraged. People often listen to music simply because their work feels lighter and more pleasurable with music than like a tiring duty, but they seldom realize how many benefits are associated to this pairing of music of our choice with exercise. Exercise not only maintains our outward appearance by keeping our physical body fit, toned and slim. It also helps in the physiology of human body where it stimulates almost all the organs inside our body and promotes good metabolism, digestion, excretion and even detoxifies. On the other hand, music plays an excellent role in relaxing our muscles and by activating our brain cells in releasing happy hormones like adrenaline and serotonin that keep us joyful and positive which will obviously improve our overall health. Since health is not defined as not having a disease but it involves a complete well-being of a person physically, psychologically, emotionally, socially, and spiritually as defined by WHO.

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while exercise helps to tone our body. Hence both together help us stick to our workout routine by making it more fun filled and energetic instead of silent boring duty. We will never know the time when we listen to our favorite music so in that way we can exercise more and not be distracted with body pains. Pleasant music is good when we do walk or yoga as it calms the mind while beats are good when we do gym exercises so it would be motivating for the individuals. Some exercises like aerobics or dancing surely require music and some sports like bicycle riding should be thought with caution.

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- You can get distracted with music and move out of schedule leaving your exercise routine aside.
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To conclude, this research suggests that it is an excellent idea to pair your workout sessions with good music so that we feel less tensed, more relaxed, encouraged, and motivated instead of being lazy to workout. Since exercise is the best way to keep oneself going doing it with music regenerates our mind along with toning our body. At the same time, we have to keep in mind to be cautious while selecting the environment specially while jogging to be sure that music doesn't affect us in any negative way like loss of balance or control. Overall exercising with music is highly beneficial and provides double benefit to our body in both physical and psychological health.

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Survey instrument or interview protocol:

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Institutional approval letter (if off AU campus): NA

Consent form (for interviews and focus groups):

Dear madam,

President of Andrews University.

Participation in this survey is voluntary and refusal will not jeopardize anyone in this college. This survey will take approximately 10 minutes to complete. If you are under 18 years of age, you are not eligible to participate in this survey. This is an anonymous

survey, and the information will be kept confidential. However, the results will be emailed to you after all the data are tabulated. This survey has been approved by Dr. Jerry Chi, MBA, PhD, PhD. Associate Dean, School of Business.
Should you have additional questions, please contact me at 269-759-5473
Thank you for your cooperation!
Geetha Raj Choppala (Principal Investigator)
MBA Student,
Andrews University

Participants recruitment documents: NA

Principal Investigator's Assurance Statement for Using Human Subjects in Research

- I certify that the information provided in this IRB application is complete and accurate.
- I understand that as Principal Investigator, I have ultimate responsibility for the conduct of IRB approved studies, the ethical performance of protocols, the protection of the rights and welfare of human subjects, and strict adherence to the study's protocol and any stipulation imposed by Andrews University Institutional Review Board.
- I will submit modifications and / or changes to the IRB as necessary prior to implementation.
- I agree to comply with all Andrews University's policies and procedures, as well as with all applicable federal, state, and local laws, regarding the protection of human participants in research.
- My advisor has reviewed and approved my proposal.