



# HOW DOES FITNESS AFFECT PERSON'S LIFE AND HEALTH?

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**Abstract:-** *Mobile fitness applications have become an essential aspect of our daily lives. As every person needs to be in healthy physical and mental state. To accommodate different needs of users, these applications offer personalized and combined nutrition and exercise suggestions at home without requiring a visit to any gym. With an increment number of fitness apps, users are able to connect and share their experiences within an online community. Going through this program makes participants eager to stay committed to fitness and be in shape. With dedication, users can gain an understanding of why exercise and physical activity is a necessary component to a healthy and productive life. This helps users stay focused on their goals.*

**Keywords:** Fitness, application, health, social sharing, workout.

## I. INTRODUCTION

There is a prevailing issue concerning the promotion of sedentary behaviour in modern society, which has a multitude of adverse health effects. Although the negative self-perception of mostly people is related to their mental health, it is likely to be worsened by poor mental condition. The mental health foundation has said that good physical health is directly related to positive mental well-being and suggested that improving physical well-being is one way to address this problem. According to study of 2015, some health-related applications released on the two various leading platforms, iPhone Operating System (iOS) and Android that had reached more than 165,000 users. Various Fitness applications provide various

features that allow users to track their fitness goal, many workout ideas, yoga ideas, post their achievements, track calorie intake, and analyse their weekly performance. Some fitness apps can be paid or unpaid or some can be premium based. Fitness apps allow users to complete a daily-

workout routines, measured by a professional trainer or through a fitness application. The diversity in fitness applications is a testament to the evolving needs of fitness enthusiasts, each seeking a customer mobile application solution that meet their personal health goals. The objective of this project is to design and develop a user-friendly and accommodating for all group ages feasible application. User can do workouts and exercises at home by using this application. This app also contains a timer that helps its users to workouts and can be paused. If user is unable to understand workout by just seeing the image, then he/she can understand it by reading about how to do it. This application contains nutrition and tips for users to take a good amount of nutrition. In this app user can give us feedback and can share this application with others on social media or by copying link. This app is beneficial for both youngsters, adults and for all genre peoples.

## II. RESEARCH METHODOLOGY

A convenient random sampling method was employed for the study. Primary data was gathered from users through staff interviews and surveys. Secondary data was collected from a variety of websites and periodicals. Extensive research was conducted to determine the features to incorporate into the app. Additionally, research investigated different techniques and algorithms that could be utilized to calculate the desired parameter.

## III. OBJECTIVES

The various objectives of this research are:-

- i. To gather user opinions on fitness applications.
- ii. To understand how fitness apps impact on consumers(users).
- iii. To understand why user finds fitness apps more useful.
- iv. To determine a fitness app is better than a fitness centre.

## IV. SCOPE OF THIS STUDY

The importance of this study is that it helps to evaluate the effectiveness of fitness applications to improve user's physical health. A majority of people prioritize their health and try to maintain physical fitness. However, majority of people find it hard to go to

fitness centres due to expenses, time and locations. These applications are acquiring increasing importance in today's society. This study demonstrates the reason behind users these applications over physical fitness centres and promoting a better impact on user's health.

## V. PROBLEM STATEMENT

Our inactive life in the today's world has led to numerous serious health complications. Additionally, some argue that advancement in technology have profoundly transformed our daily life routines. Today, an individual prefer video calls over face-to-face interactions for meeting someone, effectively it shrunk the world. These innovations in science and technology are capturing the interest and attention of technology enthusiasts everywhere and ignoring their physical health. This neglect has emergence a health crisis. Undoubtedly, lack of physical health can be a big reason for obesity. Lack of physical activity can lead to heart disease, high blood pressure, high cholesterol, diabetes, stroke and some types of cancer. Fitness applications offers a right way to get fitness and active health. Apps provide various exercises and fitness objectives.

## VI. LITERATURE STUDY

Evgeny Stankevich, Ilya Paramonov, Ivan Timofeev in their paper "Mobile Phone Sensors in Health Applications" reviewed a variety of recently created applications for embedded sensors in mobile phones. While some of these applications are currently used for medical purposes and distributed, others are still under research projects. Because there are many people around the world who own a mobile phone. The main reason for using mobile phones in healthcare is to upgrade the quality and accessibility of healthcare services. One of another benefit of using mobile phone-based healthcare solutions is to reduce the cost of these services.

Ankit Yadav, Mujib Ahamad and Md Al Amin conducted a study in their article "Use of Smartphone Fitness Apps: A Systematic Review" conducted a literature review on consumer's intentions to use mobile applications (apps) related to physical activity and fitness. Quantitative research findings are critical to evaluate consumer behaviour areas regarding sport applications were evaluated in this systematic review. A total of 13 papers were reviewed, offering a model for assessing sport consumers intentions to use fitness apps.

Valerie Gay and Peter Leijdekkers in their paper "Bringing Health and Fitness Data Together for Connected Health Care: Mobile Apps as Enablers of Interoperability" conducted a summary that a mobile phone can be used to aggregate user data. Mobile phone is used to collect user's data and record of their activity. Mobile phones can also use to collect these data and then result can be provided about their fitness and health.

Mary Gowin, Marshal Cheney, Shannon Gwin and Taylor Franklin Wann in their paper "Health and Fitness App Use in College Students: A Qualitative Study" conducted research about how college students gain weight that can be cause of serious disease. That can also be a reason of their mentally and physically health issues and can affect their study and carrier. They specifics how an application can be helpful to guide them about their physical and mental health and provide guidance to eat nutrition foods.

H. Kolivand, E. Green and S. Asadianfam in their research "A Fitness App to Fit Everybody's Schedule," has conducted that fitness apps is very useful to everyone's health. As a bad physical and mental health can be a reason of obesity, diabetes and poor mental health. Fitness apps can help to improve their mental and physical health at home and also useful to motivate them and do physical activity at home or without visit fitness centres.

Jiang Hu, Wei He, Jie Zhang and Jaeki Song in their paper "Examining the impacts of fitness app features on user well-being" reviewed a variety of literature that how a fitness app can impact on an individual's life. In their study they show how a fitness app can make a change in people's life when they go to gym physically and when they use gym applications at home.

Ritik Gaur, Gaur Singh and Mrs. V. Vijayalakshmi in their paper "Human Fitness Application" clarify how a fitness application is an important part of human lives and how it is useful to maintain their health physically and mentally. In their study they

also state that fitness applications are useful to motivate peoples and helping to reduce the obesity because nowadays peoples are highly dependent on mobile applications that are also beneficial to their health and fitness.

## VII. RESULT DISCUSSION

This application of the proposed system is working properly on all the preferred devices. All the features of the application work perfectly and efficiently. This application containing all dashboards are working perfectly. Workout dashboard is working perfectly where all workout images and pictures are clearly visible. Nutrition and tips dashboard is also working properly without any error. Rate us feature is also working perfectly. Sharing featured dashboard is completely working and responsive. Compatibility of the application is also checked on all the preferred iOS and Android devices.

## VIII. CONCLUSION

The aim of this fitness application is to promote good health as its primary objective. Moreover, it provides a good range of features such as workouts or exercises, nutrition and tips feature all in a single app. This fitness program effectively equips users

with the necessary tools to achieve their fitness goals quickly, affordably, and effortlessly. This app is very useful to manage the fitness application in an efficient way. By using this app user can workouts at home without going out or any fitness centres. By this app, users can get information about a perfect nutrition diet tip and tricks. User can Rate this application. As satisfied users can recommend the app to others, its popularity is likely to grow. Additionally, we prioritize timely updates to ensure users can adapt and access the best resources available.

## IX. REFERENCE

1. E. Stankevich, I. Paramonov and I. Timofeev, "Mobile phone sensors in health applications," 2012 12th Conference of Open Innovations Association (*FRUCT*), Oulu, Finland, 2012, pp. 1-6, Doi: 10.23919/FRUCT.2012.8122097.  
URL: <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8122097&isnumber=8122076>
2. Yadav, Ankit, Mujib Ahamad, and Md Al Amin. "The Use of Smartphone Fitness App: A Systematic Review." (2021).
3. Gay V, Leijdekkers P, "Bringing Health and Fitness Data Together for Connected Health Care: Mobile Apps as Enablers of Interoperability," *J Med Internet Res* 2015;17(11): e260, DOI: [10.2196/jmir.5094](https://doi.org/10.2196/jmir.5094)
4. Mary Gowin, Marshal Cheney, Shannon Gwin and Taylor Franklin (2015), "Health and Fitness App Use in College Students: A Qualitative Study," *American Journal of Health Education*, 46:4, 223-230, DOI: [10.1080/19325037.2015.1044140](https://doi.org/10.1080/19325037.2015.1044140)
5. H. Kolivand, E. Green and S. Asadianfam, "A Fitness App to Fit Everybody's Schedule," 2021 14th International Conference on Developments in eSystems Engineering (DeSE), Sharjah, United Arab Emirates, 2021, pp. 13-17, Doi: 10.1109/DeSE54285.2021.9719572.  
URL: <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9719572&isnumber=9719327>
6. Jiang Hu, Wei He, Jie Zhang and Jaeki Song, "Examining the impacts of fitness app features on user well-being" *Information & Management*, Volume 60, Issue 5, 2023, 103796, ISSN 0378-7206, <https://doi.org/10.1016/j.im.2023.103796>. (<https://www.sciencedirect.com/science/article/pii/S0378720623000447>)
7. Ritik Gaur, Gaur Singh and Mrs. V. Vijayalakshmi "Human Fitness Application," Volume 10, Issue 2022, *International Journal for Research in Applied Science & Engineering Technology (IJRASET)*, DOI: <https://doi.org/10.22214/ijraset.2022.48263>
8. S. Agarwal et al., "FitMe: A Fitness Application for Accurate Pose Estimation Using Deep Learning," 2021 2nd International Conference on Secure Cyber Computing and Communications (ICSCCC), 2021, pp. 232-237, doi: 10.1109/ICSCCC51823.2021.9478168.
9. Liang, Jifeng. "Research on Fitness APP." (2019).
10. Maria, D. Molina & S. Shyam Sundar (2020), "Can Mobile Apps Motivate Fitness Tracking? A Study of Technological Affordances and Workout Behaviors," published in *Health Communication*, 35:1, 65-74, DOI: [10.1080/10410236.2018.1536961](https://doi.org/10.1080/10410236.2018.1536961)
11. "Can Mobile Phone Apps Influence People's Health" (2024). Retrieved April 19, 2024, from [www.ncbi.nlm.nih.gov/pmc/articles/PMC5295827/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5295827/)

