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Assessment of Fitness Applications Use among People of Jazan, Saudi Arabia

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Effective, Fitness Apps, Health, Mobile Applications, Smart Phones.

ABSTRACT:
In this digital world, everyone is busy working from dawn to dusk. It is essential to keep their health in good condition for the long run and also healthy body keeps a healthy mind. Fitness is the act of taking care of a healthy body and healthy mind. Fitness is a personal journey that varies based on age, fitness level, health status, and personal goals. Setting realistic goals, staying consistent with exercise and healthy eating habits, and adopting a holistic approach to well-being contribute to achieving and maintaining a fit and healthy lifestyle. With the advancement of smartphones and mobile applications, people started depending on using fitness application exercises for their health to get feedback immediately. This research aims to assess the usage of fitness applications among the people of Jazan, Saudi Arabia. The result of this research study confirms that using fitness apps is effective for them to reach their goals of keeping fit.

1. Introduction

Recent advances in mobile devices, such as smartphones, have fundamentally changed how people work and communicate with each other [1]. As such, continuous developments of mobile devices enabled the rapid spread of smartphone applications (apps) that provide users with numerous services [2]. The personal and organizational lives of contemporary individuals have become largely reliant on advanced information communication technologies (ICTs). Particularly, smartphones have permeated every arena of today's society. Supported by the development of communication infrastructures, especially that of high-speed communication networks, which have further facilitated the wired and wireless Internet, the ownership of smartphones as well as the use of smartphone apps has largely increased [3]. Today, our daily lives rely intensively on the "omnipotent" smartphones. The global smartphone fitness application market has been growing at a rapid pace. In particular, among diverse categories of apps, 325,000 health-related apps have been developed by 2017 [4]. Within health-related apps that range from treatment compliance to self-diagnosis, health and fitness is one of the most popular categories. It is reported that 58% of smartphone users have downloaded at least one health and fitness app on their devices [5] and the usage has grown by over 330% from 2014 to 2017 [6]. Fitness apps serve as a major component of the health apps for smartphones [7]. Emerging smartphone technology apps offer various capabilities and benefits for consumers and providers of behavioural health care. With the help of fitness apps, users might find it easy to maintain motivation to achieve their fitness goals [8]. The management of personal health and fitness is no exception to this trend. These apps cover a wide array of areas including diet, exercise, weight loss, nutritional values, and vegetarian choices [9]. In traditional methods of exercise, fitness apps allow users to exercise anytime and anywhere with effective guidance and monitor, record, and manage their exercise process, thereby enhancing their exercise effectiveness. A growth in the use of apps related to

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health and fitness has also been observed to promote physical exercise and knowledge of the condition and health of users [10]. For this reason, an increase in the number of apps developed related to health and fitness has been observed in recent years, just as the interest in their scientific study [11]. Health and fitness apps save users time and effort and allow them to engage in a healthy lifestyle [12]. In particular, fitness apps provide smartphone users with tools and emotional support to increase their exercise knowledge and skills to maintain their physical activity [13]. Benefit of going with medical apps designed by the best health and fitness mobile app Development Company gives users an escape from rushing to the gym and medical service providers for every single doubt [14].

2. Methodology

This research study is a cross-sectional descriptive analysis study. 412 participants have participated in this research. The duration of this research study was from September 2022 to May 2023. The target population of this research is the people of Jazan. Convenience Sampling was used in this study. The data has been collected from the people who live in Jazan, whose age is from 18 to 50 years old, and who use smartphones. The inclusion criteria for this research were that the participants should be from the age of 18 to 50 old and use smartphones. The participants below the age of 18, above the age of 50, and those who don't use smartphones are excluded from this research. The data was collected through a questionnaire. The questionnaire consists of two sections. The first section consists of the demographic characteristics of the participants such as age, gender, marital status, residential area, region, education, occupation, and income and the second section consists of information about fitness application sources, Purpose, features, satisfaction, and barriers. The questionnaire was both in Arabic and English format and it was distributed among the people of Jazan through hard copy and through online.

3. Results

Table 1: Socio-Demographic Characteristic (N=412)

Characteristic	Number (%)
Gender	
Female	323(78.4)
Male	89(21.6)
Age	
18-20	75.8(18.4)
21-25	156(37.9)
26-30	41(10)
31-35	34(8.3)
36-40	32(7.7)
41-45	49(11.9)
46-50	24(5.8)
Educational Qualification	
High School	124 (30.1)
Bachelors	234 (56.8)
Masters	30 (7.2)
Ph.D	6 (1.5)
others	18 (4.4)
Occupation	
Employed	225(54.6)
Unemployed	187(45.4)
Residential Area	
Rural	218(52.9)
Urban	194(47.1)

The above table shows that the majority of participants were female 323(78.4 %) and male 89(21.6%).37.9% of participants were from the age 21 to 25 years, 18.4% of participants were from the age of 18 to 20 years, 11.9 % of participants were from age 41 to 45 years 10% of participants were from age 26 to 30 years, 8.3% of participants were from the age 31 to 35 years, 7.7% participants were from age 36 to 40 years and 5.8% of participants from age 46 to 50 years. The educational qualifications of the participants were 234 (56.8%) Bachelors, 124 (30.1%) had an education up to High School, 30 (7.2%) were Masters and 6 (1.5%) were Ph.D. holders and 18 (4.4%) were others It is identified that 54.6% were unemployed and 45.4% were employed. 218(52.9%) of the participants resides in rural area of Jazan and 194 (47.1%) were resides in Urban area of Jazan.

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Table 2: Fitness application use among the participants (N=412)

Gender	Yes	No
Male	61(14.80%)	28(6.8%)
Female	240(58.25%)	83(20.15%)

The above table shows that distinct that the proportion of male individuals utilizing fitness applications is 61 (14.80%), and those who do not use it 28(6.8%). The utilization rate of fitness apps among females is 240(58.25%), whereas those who do not use in females 83(20.15%).

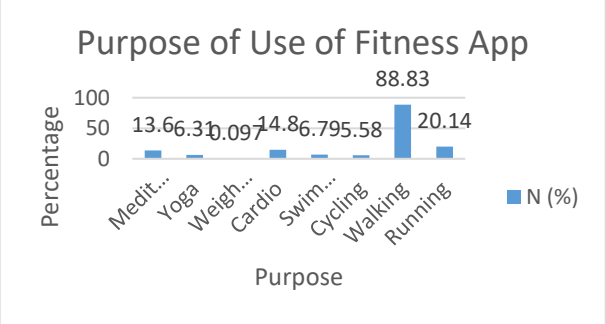

Fig 1: Purpose of fitness application used by the participants (N=412)

The above figure shows the various purposes of the use of fitness applications among the participants. 366(88.83 %) of participants use walking applications followed by running applications 83(20.14%). 61(14.80) participants are using cardio applications. 56(13.60%) followed by 40(9.70%) of participants using weight lifting applications.26(6.31%) participants are using Yoga applications followed by 23(5.58%) participants are using cycling applications.

Table 3: Sources of fitness applications (N=412)

Source	N (%)
Advertisement offline(Newspaper, Magazine)	7(1.70%)
Appstore, Google Play	78(18.90%)
Advertisement online(Internet, Social Media)	150(36.40%)
Friends, Family recommendation	177(43%)

The above table states that the sources where participants came to know about the fitness applications are 117(43%) through their friends and families, 150(36.4%) through online advertisements like the Internet and social media, 78(18.9%) through finding themselves from the App store and Google play followed by 7(1.70%) from advertisements offline like from newspaper and magazines.

Table 4: Common Usability Features of Fitness Applications

Common Usability Features	N (%)
App Design	143(34.6%)
Evaluation of Performance	289(69.9%)
Ease of Use	303(73.5%)
Tracking Calories	296(71.8%)

The above table indicates that the common usability features of fitness applications preferred by participants were, that 303(73.5%) participants preferred easy to use, 296(71.8) preferred it should track calories, 289(69.9%) preferred evaluation of the participants, and 143(34.6%) the design of the application preferred by the participants.

Table 5: Fitness application additional features preferred by participants

Additional Features Preference	N (%)
complex exercise explainer	181(43.9%)
Meal Preparation Guide	113(27.4%)
Personal Coach Assistance	95(23.1%)
Grocery Shopping list	23(5.6%)

From the above table, 181(43.9%) of participants prefer the fitness applications that explain the complex exercise, 113(27.4%) participants prefer the meal preparation feature, 95(23.1%) prefer personal coach assistance followed by 23(5.6%) grocery shopping list.

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Table 6: Fitness application user satisfaction

Opinion	N (%)
Strongly Agree	115(27.9%)
Agree	148(35.9%)
Neutral	33(8%)
Disagree	53(12.9%)
Strongly Disagree	63(15.3%)

The above table indicates user satisfaction with fitness applications 115(27.9%) participants strongly agree that they are satisfied with using fitness applications, 148(35.9%) agreed, 33(8%) were neutral, 53(12.9%) participants disagreed with the satisfaction followed by 63(15.3%) of participants were strongly disagree.

Fig 2: Factors that support usage of Fitness Applications

Fig 2: Factors that support usage of Fitness Applications

The above figure shows that 323(78.4%) participants are using fitness applications due to time. The participants can use these apps at any time according to their convenience. The second factor is cost. 161(39.10%) participants using fitness apps are low cost and some are available for free. 75(18.2%) participants are using the application due to its motivational factor.

Fig 3: Barriers to Using Fitness Applications

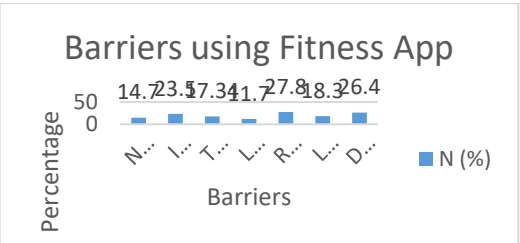

Fig 3: Barriers to Using Fitness Applications

The above figure shows that the various barriers to using fitness applications are 115(27.8%) participants are not sure about the reliability.109 (26.4%) participants feel it is difficult to use fitness applications. 97(23.5%) participants said the information was not clear. 75(18.3%) participants were said lack of awareness about fitness apps.71 (17.34%) participants said due to technical barriers 61(14.7%) said that the due to the results not being achieved. 48(11.7%) said due to language.

4. Discussion

This research study assesses the use of fitness applications among the people of Jazan. We assessed the usability, purpose, features, and barriers Young people were more likely to use fitness or sports Apps when they found them more functional, which meant that this intention had a great influence on the actual use of the app [15].In our study, 37.9% were young people using fitness applications. When using mobile media for physical activities, women found enjoyment and goal-setting more important than did men. This might reflect the higher motivation of women for health-oriented behavior [16], which is similar to our study, with females (58.25%) using fitness applications while males were (14.80%). In one of the studies when trying to use fitness apps, potential fitness app users perceived performance expectancy as the most effective indicator of intention to use fitness apps. These results were consistent with the outcomes of previous studies showing that performance expectancy plays an essential role when using mobile fitness apps [17]. In our study instead of performance evaluation, ease of use (73.5%) plays an essential role in the use of fitness apps.

5. Conclusion

Fitness applications play a vital role in helping to keep the body and mind fit. This study indicates that most of the respondents intend to use fitness apps. Fitness has become an important aspect among youngsters and adults this is evident from the study as the majority of the app users are young adults. This study reveals that females prefer more using fitness applications than males. Most participants agree that fitness apps are highly effective in providing facilities to attain their fitness goals with less cost, time, and easy accessibility. The majority of participants are using fitness

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applications for walking. Fitness applications seem to have a greater positive impact on the users' motivation when it is used. It is found that participants prefer ease of use, tracking calories, evaluation performance, and design of the app along with additional features like explanations about complex exercises, meal preparation guides, etc. It was found that more than half of the participants were satisfied with using fitness applications.

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