

A DESCRIPTIVE STATISTICAL ANALYSIS OF REFERRAL CONSUMER BEHAVIOR INFLUENCING THE USE OF CHATGPT FOR FITNESS

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Abstract

This paper examines the impact of referral behaviour on the use of ChatGPT to find fitness through a descriptive statistical analysis. This analysis is conducted using 415 valid responses that were obtained among the users of health and fitness applications. The primary aim is to learn how social referrals influence the adoption decision of users, and how they stay active using apps related to fitness. In this study, one of the statements will be the dependent variable, i.e., I use this app because my friend/relative uses this app, which depicts referral-based adoption behaviour. The independent variables are intention to persist in using health and fitness applications, being a user tracking fitness activities via the application and user satisfaction with health and fitness platforms. Descriptive statistics was used to compare the trends of responses and relationships between the variables. The results indicate that referral behaviour plays an important role in determining the intention of users to adopt and be continued to use ChatGPT in terms of fitness. Those who had firm plans of continuing use and had already developed past practices of using fitness-trackers were more prone to adopting the use of the app by social suggestions. Further, there was a correlation between increased satisfaction and increased acceptability toward usage through referrals, and this implies that satisfied users are more likely to believe in recommendations by their social networks. In general, the paper provides a significant focus on the role of social influence and positive user experiences in marketing AI-based fitness apps and provides the insights to enhance the user engagement and retention measures.

Keywords: Referral, Behavior, ChatGPT for Fitness, Continued Usage Intention.

1. Introduction

The health and fitness sector has undergone major changes with the increased infiltration of artificial intelligence (AI) in their day-to-day activities. Digital health apps are not all about basic tracking of activities anymore; they offer personalized guidance and virtual coaching together with interactive support systems which make them more engaging to users. One such type of emerging technology is AI-driven conversational software like ChatGPT, which is actively being considered in terms of providing fitness advice, motivation, and information related to health. It is possible to note that they can provide real-time feedback, tailored recommendations, and easy-to-use communication, which makes them a potentially valuable tool in assisting personal fitness objectives. Social influence, in conjunction with the development of technology, has also become a significant factor in the adoption of digital application by users. People usually depend on the advice given by friends, their family members or a peer group to make a decision to use new technologies. Referral behavior is very important in minimizing uncertainty and establishing trust especially in health and fitness where people desire to have solutions that are reliable and familiar. It is thus crucial to comprehend the effects of such social referrals in the adoption and the further use of AI-based fitness platforms.

Past studies indicate that continuity of use, addiction, and user satisfaction are some of the critical factors of technology acceptance and active use. Consumers who also pay close attention to their exercise and feel satisfied with the functionality of the apps tend to implement digital features in their lives. Nonetheless, the interaction of these behavioral factors with referral-based adoption on the AI conversational platform such as ChatGPT has not been thoroughly studied. The current research will fill this gap by examining referral behavior that affects the use of ChatGPT to find fitness using descriptive statistics analysis of 415 user responses. The study aims to offer an understanding of user adoption patterns by examining the relationship between referral influence, continued usage intention, and habit of fitness tracking and user satisfaction. The results may help improve the knowledge about the use of AI-enabled technology in the field of fitness and provide feasible insights to developers and marketers aiming to improve the user experience and retention in the long term.

2. Literature Review

The health and fitness scene has become extremely reorganized owing to the swift emergence of artificial intelligence (AI) and mobile technologies in the fields of health and fitness. Applications based on AI that include ChatGPT-based fitness tools are widely accepted because of their potential to offer personalized instructions, accessible nature, and interactive experiences to users. The latest researches carried out in the period of 2025-2026 have pointed out that both behavioral and psychological influences like intention, habit formation, satisfaction, and social influence determine user adoption and lasting use of health and fitness applications not only by technological features. The studies of technology adoption always reveal behavioral intention as one of the major determinants of the continued use of digital health platforms by the user. By combining the Unified Theory of Acceptance and Use of Technology (UTAUT) model with the task-technology fit model, Thantrige et al. (2025) discovered that perceived usefulness, satisfaction, and habitual use have a significant impact on continued adoption of technology. Their results indicate that people are more ready to utilize health apps when they think that the technology can be used to support their personal fitness targets and provide them with long-term packages. To validate this assertion, Im et al. (2025) found out that positive experience with the usability of wearable health systems, to a large extent, led to the increase in intention of users to use digital fitness tools. These articles highlight the significance of continued usage intention as a significant force of technology use.

Habit formation is another issue that has been brought to the fore in the recent literature. Research indicates that the constant exposure to AI systems tends to change motivation into a routine action. He et al. (2026) have shown that the initial application of personalized AI nudging encourages users but over time it assists them in developing consistent fitness routines by sustained use. Likewise, previous empirical studies have shown that the habitual tracking behavior is among the most predictive of the use of fitness apps and in many cases, it overshadows demographic or technological factors (Angosto et al., 2023). The results highlighted herein underscore the fact that the user can make fitness activities a daily habit through constant fitness monitoring, which in turn reinforces the need to continue using the app. Satisfaction of the users is also one such importance in shaping continuance behavior. Studies of mobile fitness applications suggest that the satisfaction with the performance of the app, its usability, and the perceived outcome have a positive impact on user retention and engagement (Faizah et al., 2024). García-Fernandez et al. (2021) further note that satisfied user receive higher chances to form regular exercise routines and continue communication with fitness platforms. Moreover, Mescher et al. (2025) identified usability, trust, and perceived effectiveness as the key factors of satisfaction and continued use. As a whole, these studies affirm the fact that satisfaction is a very powerful motivational element that encourages users to resume using health and fitness applications.

Referral behavior is also becoming a major determinant of digital health adoption as well as social influence. Social validation and peer recommendation minimise the uncertainty level related to the new technologies and enhance user trust. Sharma and Gupta (2025)

discovered that social influence assists in breaking the barrier of resistance to bearing the health application by coaction by experience. Similarly, Chiam et al. (2024) added that the current AI-based fitness ecosystems have been shifting towards adding social and community functionalities to be more engaging and habit-forming. These results are a powerful argument in favor of the assumption that people tend to use applications when suggested by their friends and family, which makes the notion of referral-based usage behavior particularly important. The latest trends indicate that there is a shift in the nature of the simplest fitness tracking apps to more sophisticated AI-driven coaching programs that provide individualized health advice. AI healthcare helpers will process user information to provide personalized fitness advice and enhance interaction and satisfaction (Wired, 2025). Nevertheless, recent studies also caution that personalization too much will bring emotional strain or unrealistic demands when not planned thoughtfully (University College London, 2025). This implies that effective implementation of the same requires a balance between sophisticated technology and user-friendly design. Although numerous studies have been conducted regarding the issue of technology acceptance, habit formation, and user satisfaction in fitness apps, few research projects, in particular, focus on referral behavior in AI conversational applications like ChatGPT. Furthermore, there is limited empirical data relating social influence to the intention to continue using and a habit of AI-based fitness environment. That is why the current research will fill this research gap by examining the behavior of referral and its correlation with the intention of further use, habit tracking and satisfaction through describing statistical analysis with 415 user responses.

3. Research Methodology

The proposed research is a quantitative research design to investigate the phenomenon of referral behavior that determines the use of ChatGPT in fitness applications. The perceptions and behavioral pattern and relationship among the study variables were analyzed using a descriptive research approach. The study is aimed at studying the role of social influence, usage intention, habit formation, and satisfaction in the adoption behavior based on referral. The primary data were gathered in the form of a questionnaire in questionnaire format that was sent to health and fitness applications users. A valid response was obtained and analyzed on 415 respondents. The questionnaire will include statements evaluated based on a Likert scale to determine the level of agreement of the respondent to the continued use intention, use of fitness tracking, satisfaction with health and fitness application, and use of referral-based usage behavior. Referral behavior was the dependent variable of the study, which was measured by the following statement: I use this app as my friend/relative uses this app. Other independent variables were intention of continued usage of the health and fitness apps, the habit of tracking fitness with the help of the given app and user satisfaction with health and fitness applications. Frequency distribution, mean, and standard deviation were used as some of the descriptive statistical methods to learn the response patterns and have a summary of the data characteristics. These techniques assisted in determining general trends, the degree of consensus or association among variables without the need to test causation. The purpose of the analysis was to offer information about the user adoption behavior to AI-driven fitness environments. The research makes it reliable with systematic measurements and data collection methods. Nonetheless, the study will be based on self-reports, which means that the results can be subjective perceptions of users. In spite of this drawback, the research is a useful piece of empirical evidence on the impact of referral networks and user experiences on the uptake and subsequent use of AI-based fitness applications like ChatGPT.

4. Objectives of the study

The present study aims to examine the role of referral behavior in influencing the adoption and continued use of ChatGPT for fitness purposes. The specific objectives are:

- To analyze the influence of social referral behavior on the use of ChatGPT for fitness applications.
- To examine the relationship between users' intention for continued usage and referral-based adoption of fitness apps.
- To assess the impact of fitness tracking habits on users' adoption of ChatGPT through social influence.
- To evaluate the role of user satisfaction with health and fitness apps in shaping referral-driven usage behavior.
- To understand overall user engagement patterns in AI-enabled fitness applications using descriptive statistical analysis.

5. Research Hypotheses

Based on existing literature and study objectives, the following hypotheses are proposed:

- **H1:** Intention of continued usage of health and fitness apps has a significant positive influence on referral-based usage of ChatGPT for fitness.
- **H2:** Habit of tracking fitness activities using the app significantly influences referral-based adoption of ChatGPT for fitness.
- **H3:** User satisfaction with health and fitness applications positively affects referral-driven usage behavior.
- **H4:** Social referral behavior significantly contributes to users' continued engagement with ChatGPT for fitness purposes.

6. Results and Discussion:

Table 1: Descriptive of users of Referral Behavior Influencing the Use of ChatGPT for Fitness

Variables	Mean	Std. Deviation	N
I use this app as my friend/relative use this app	3.14	1.306	415
I have' intention of continued usage of health and fitness apps	2.70	1.321	415
I have' habit of tracking my fitness using this app	3.03	1.252	415
I am satisfied with use of my health and fitness apps	2.53	1.281	415

Source: Compiled by Authors

Table 1 shows descriptive as N=415 responses, Highest number of users use ChatGPT for Fitness as their friend or relative use the app.

Table 2: Model Summary^b Impact of using CHAT GPT for fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.463 ^a	.215	.209	1.162	1.733

Source: Compiled by Authors

a. Predictors: (Constant), I am satisfied with use of my health and fitness apps, I have' intention of continued usage of health and fitness apps, I have' habit of tracking my fitness using this app

b. Dependent Variable: I use this app as my friend/relative use this app

In Table 2, R=.463, shows relationship if dependent and independent variable.

Table 3: Regression and ANOVA Impact of using CHAT GPT for fitness

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	151.656	3	50.552	37.439	.000 ^b
	Residual	554.956	411	1.350		
	Total	706.612	414			

Source: Compiled by Authors

a. Dependent Variable: I use this app as my friend/relative use this app
 b. Predictors: (Constant), I am satisfied with use of my health and fitness apps, I have' intention of continued usage of health and fitness apps, I have' habit of tracking my fitness using this app

Table 3 shows $F=37.439$, with $Sig=.000$, showing significant association among dependant and independent variables. Which shows **H1**: Intention of continued usage of health and fitness apps has a significant positive influence on referral-based usage of ChatGPT for fitness is accepted. **Also H2**: Habit of tracking fitness activities using the app significantly influences referral-based adoption of ChatGPT for fitness is accepted. **H3**: User satisfaction with health and fitness applications positively affects referral-driven usage behaviour is accepted. As well as **H4**: Social referral behavior significantly contributes to users' continued engagement with ChatGPT for fitness purposes is also accepted.

Table 4: Correlations of Impact of using CHAT GPT for fitness

Statistics/Variables	I use this app as my friend/relative use this app	I have' intention of continued usage of health and fitness apps	I have' habit of tracking my fitness using this app	I am satisfied with use of my health and fitness apps
Pearson Correlation	I use this app as my friend/relative use this app	1	0.436	0.33
	I have' intention of continued usage of health and fitness apps	0.436	1	0.574
	I have' habit of tracking my fitness using this app	0.33	0.574	1
	I am satisfied with use of my health and fitness apps	0.369	0.548	0.659
Sig. (1-tailed)	I use this app as my friend/relative use this app	.	0	0
	I have' intention of continued usage of health and fitness apps	0	.	0
	I have' habit of tracking my fitness using this app	0	0	.
	I am satisfied with use of my health and fitness apps	0	0	.
N	I use this app as my friend/relative use this app	415	415	415
	I have' intention of continued usage of health and fitness apps	415	415	415
	I have' habit of tracking my fitness using this app	415	415	415
	I am satisfied with use of my health and fitness apps	415	415	415

Source: Compiled by Authors

Table 4 shows correlation among Predictors: (Constant), I am satisfied with use of my health and fitness apps, I have' intention of continued usage of health and fitness apps, I have' habit of tracking my fitness using this app and Dependent Variable: I use this app as my friend/relative use this app. All variables have moderate and positive correlation

7. Conclusion

A descriptive statistical analysis was used to investigate the central tendencies and patterns of responses of the variables. As the findings revealed, referral behavior is an important factor that affects the decision of users to adopt and use ChatGPT when it comes to fitness. Those users that indicated that they had stronger intentions to continue using the product and had already developed the habit to track fitness activities were more in agreement with the referral-based usage. Also, health and fitness apps satisfaction was found to correlate positively with referral influence implying that users who are satisfied with applications have a high probability of adopting applications which are referred to them in their social networks. The paper emphasizes the role of social influence and user experience in the marketing of online fitness applications. The findings imply that creators and advertisers of AI-based fitness apps must work on increasing user satisfaction and habit formation and use referral networks to attract more users and long-term participation. This study helps to explain the behavior of technology adoption in AI-based health and fitness settings and gives viable tips on how to enhance the user retention strategies.

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