



Swim to Dream-A Study on factors impacting Fitness Bands adoption for Indian Swimmers

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Abstract

Wearable devices are increasingly gaining popularity among swimmers worldwide. These devices encompass all forms of electronic devices that are computational or sensory in nature and can be worn either on the body or with clothing. Among these wearable, fitness bands are gaining widespread popularity and are currently a trend among swimmers. Fitness bands can offer improved information and communication tools, especially for athletes such as swimmers, thereby simplifying their everyday lives. However, a report has indicated that the Indian market has a negative attitude towards the adoption of wearable. To explore how fitness bands can be accepted by swimmers in the Indian market, a study was conducted using the theory of reasoned action as the foundation for the theoretical framework. The study incorporated external variables such as perceived user engagement and perceived visual aesthetics to develop a new conceptual framework. A qualitative research approach was employed, with interviews conducted to gather swimmers' opinions on fitness bands. The study's findings suggest that fitness bands have a potential future in the Indian market if they offer useful features and a decent design.

Keywords: Indian Swimmers, Fitness Bands, Technology Acceptance.

Introduction

Wearable technology has become increasingly popular worldwide due to the increasing awareness of the benefits of physical activity, the convenience of technology, and the growing market of the fitness industry. Fitness bands are user-friendly, affordable, and can provide real-time feedback on the user's physical activity. (Alagöz et al. 2021) Swimming is a popular form of exercise and sport in India, with the use of fitness bands among Indian swimmers becoming increasingly popular. Fitness bands offer swimmers an additional tool to monitor their progress and make data-driven decisions to improve their performance. According to a report by MarketsandMarkets, the wearable technology market in India is expected to reach \$4.5 billion by 2026, with fitness bands being the most popular wearable device. (Madanian et al. 2022) This is due to the growing awareness of health and fitness, the need for convenience in tracking physical activity, and the increasing adoption of technology. The fitness band market is highly

competitive, with major players such as Fitbit, Xiaomi, Samsung, and Apple competing for market share. Fitness bands come with a variety of features such as heart rate monitoring, sleep tracking, GPS tracking, and compatibility with smartphones. (Chiu et al. 2021) Research has identified several factors that can influence swimmer adoption of wearable technology, such as perceived usefulness, ease of use, compatibility, and personal innovativeness. This research paper aims to identify the factors that impact the adoption of fitness bands among Indian swimmers. (Mokhtari et al. 2020) This study will explore the reasons for the adoption of fitness bands, the factors that influence the decision-making process when choosing a fitness band, the perceived benefits and drawbacks of using fitness bands, and the integration of fitness bands into their training regimen. (Noor et al. 2023) The findings of this research paper will be beneficial for fitness band manufacturers, marketers, and swimmers who are looking to improve their performance through data-driven decisions. (Brophy et al. 2021)

Research Objectives

The objective of this research is to obtain a more profound comprehension of wearables. The focus is on examining a particular product within this category of technology. The primary goal is to determine the factors that impact a swimmer's adoption of fitness bands and the extent of their willingness to use such a device. Ultimately, this paper aims to investigate the potential for a fitness band to be embraced by the Indian market from the perspective of swimmers.

Research Questions

Considering the study's background, problem discussion, and purpose, the research questions for this paper have been developed to steer its objectives.

RQ1: What are the factors that impact swimmers' acceptance of fitness bands?

The first research question aims to investigate the factors that hold significance in swimmers' acceptance of fitness bands.

RQ2: In what ways do these factors influence swimmers' inclination to use fitness bands?

The second research question aims to identify how the factors of acceptance affect swimmers' intention to use fitness bands.

Research Methodology

Research Purpose

This paper has a descriptive research purpose, which is to examine swimmers' acceptance of fitness bands. However, it also encompasses elements of exploratory research to shed light on how the factors influence swimmers' intention to use fitness bands. (Edwards, 2020)

Research Approach

In this study, a qualitative research approach was utilized to test the conceptual framework and gain in-depth knowledge about the factors that are crucial to swimmers' acceptance of fitness bands and how these factors influence intentions to use this technology. (Kyngäs, 2020)

Research Design

For this paper, a case study of fitness bands was utilized as the most appropriate approach to gain a detailed understanding of individuals' attitudes and behavioral patterns towards the acceptance of fitness bands. This design enables researchers to examine a phenomenon in its real-life context, allowing for a more comprehensive understanding of the subject matter. (Schwarze et al. 2020)

Data Sampling

In this study, the sampling unit comprised young swimmers as they were considered to be a suitable target group due to their familiarity with technology. The sample consisted of ten in-depth interviews conducted with swimmers from various cities. A non-probability sampling technique was employed in this paper, specifically the quota sampling method. (Staller, 2021)

Data Collection

In-depth interviews were the pivotal source for the primary data collection of this study. The in-depth interviews took place in offline mode for a few participants and online mode for other participants who were not available in the city. Each interview lasted for approximately ten to fifteen minutes. The author led the conversation with the help of a designed questionnaire. Secondary data involved scholarly articles and documents to explore and explain the background to acceptance theory. These data also laid the foundation for the conceptual framework developed to explore swimmers' acceptance of Fitness Bands. (Alam, 2021)

Data Analysis

Qualitative data analysis may present certain difficulties. To address this, the author conducted a data reduction process by comparing theories and frameworks to the collected data to identify the most relevant information for the study. The data was then analyzed by coding it into categories based on the frame of reference, enabling the data to be presented in a more manageable and logical way. The findings from the empirical data were used to draw conclusions. (Lester et al. 2020)

Literature Review

Market Overview

Fitness bands, also known as activity trackers, have become increasingly popular worldwide due to their ability to monitor and track daily physical activities. (Ráthonyi et al. 2021) However, there has been limited research conducted on the factors that impact their adoption among Indian

swimmers. (Vinnikova et al. 2020) This literature review aims to examine the existing research on the factors impacting fitness band adoption for Indian swimmers. (Gupta et al. 2021) Several studies have been conducted on the factors impacting fitness band adoption in general, which can be applied to the Indian swimmer context. (Ferraris et al. 2020) The study found that perceived usefulness, perceived ease of use, and social influence were the three main factors that significantly impacted the adoption of fitness bands. (Al-Rawashdeh et al. 2022) The study found that perceived usefulness, ease of use, and perceived trustworthiness were the three main factors that influenced the adoption of fitness trackers among Indian consumers. The author suggested that fitness trackers should be designed to meet the specific needs and preferences of Indian consumers.

Theory of Reasoned Action

The theory of reasoned action (TRA) is a social psychological theory developed by Martin Fishbein and Icek Ajzen in the 1970s. (LaCaille, 2020) It proposes that people's behavior is influenced by their intentions to engage in that behavior, which are determined by their attitudes towards the behavior, subjective norms, and perceived behavioral control. (Ng, 2020) Studies have found that attitudes towards fitness bands are positively associated with the intention to adopt them, while subjective norms are not significantly associated with intention. (Xiao, 2020) Perceived behavioral control is found to have a significant positive association with intention. Perceived usefulness, perceived ease of use, social influence, and perceived compatibility are all factors that influence the adoption of fitness bands. (Effendi et al. 2021) Perceived usefulness refers to the degree to which a person believes using a fitness band will help them achieve their health and fitness goals. Perceived ease of use refers to the degree to which a person believes using a fitness band will be easy and straightforward. (Liu & Tsaur, 2020) Social influence refers to the impact that the people around us have on our behavior. Perceived compatibility refers to the degree to which a person believes using a fitness band is compatible with their lifestyle and values. Understanding these factors can help to inform interventions and strategies aimed at promoting the adoption of fitness bands. (Copeland & Zhao, 2020)

Diffusion of Innovations Theory

The Diffusion of Innovation (DOI) theory is a framework for studying the adoption of new technologies. It identifies five types of adopters: innovators, early adopters, early majority, late majority, and laggards. (Sartipi, 2020) Factors impacting the adoption of fitness bands include individual factors, social factors, organizational factors, technological factors, and environmental factors. (Oyelana et al. 2021) Individual factors include age, gender, income, and education level, while social factors include social influence and perceived norms of a person's social network. Organizational factors include the influence of work and organizations on the adoption of new technologies. (Okour et al. 2021) The adoption of fitness bands is influenced by a variety of factors, including individual, social, organizational, technological, and environmental factors. (Al-Razgan et al. 2021) Organizations and marketers can develop effective strategies to promote the adoption of fitness bands by targeting younger and more educated individuals, emphasizing the usability, design, and features of the technology, and partnering with organizations that promote physical fitness. (Xia, 2022) By understanding these factors, organizations and

marketers can increase the likelihood of successful adoption and improve the health and well-being of individuals and society. (Sipahutar et al. 2020)

Technology Acceptance Model

The Technology Acceptance Model (TAM) is a theoretical framework that provides insight into the factors that affect the adoption of technology. (Dube et al. 2020) It proposes that the adoption of technology is influenced by two main factors: perceived usefulness and perceived ease of use. It has been extended to include other factors such as social influence, subjective norm, and facilitating conditions. (Skare& Soriano, 2021) This literature review aims to provide a detailed and descriptive overview of the TAM and its application to the adoption of fitness bands. (Denning & Lewis, 2020) The adoption of fitness bands is influenced by various factors such as perceived usefulness, perceived ease of use, social influence, subjective norm, and facilitating conditions. Perceived usefulness is a key factor in the adoption of fitness bands, while perceived ease of use is a key factor in the adoption of fitness bands. Social influence is a strong predictor of fitness band adoption, while subjective norm is a significant predictor of fitness band adoption. (Hooks et al. 2022) Facilitating conditions refer to the extent to which individuals perceive that the necessary resources and support are available to facilitate the adoption of fitness bands. Demographic factors such as age, gender, education, and income level have been found to impact the adoption of fitness bands. (Sharma & Ahmad, 2022) The Technology Acceptance Model provides a theoretical framework for understanding the factors that impact the adoption of technology. Future research can explore how these factors interact and the extent to which they impact the adoption of fitness bands among populations. (Camilleri& Kozak, 2023)

Theory of Planned Behavior

The Theory of Planned Behavior (TPB) is a theoretical framework that explains human behavior by considering cognitive and affective factors. (Conner, 2020) Attitude, subjective norms, and perceived behavioral control are the three key factors that predict behavior. (Bosnjak et al. 2020) Attitude can be influenced by perceived usefulness, ease of use, and compatibility with personal values and goals. (Ajzen& Schmidt, 2020) Subjective norms can be influenced by social influence from peers, family, and healthcare professionals. (Barbera& Ajzen, 2020) Perceived behavioral control is an individual's perception of the ease or difficulty of performing a behavior. It can be influenced by perceived self-efficacy and technology anxiety, as well as perceived privacy and security concerns, cost, and design and aesthetics. (Hagger et al. 2022) The Theory of Planned Behavior provides the understanding of the factors that impact the adoption of fitness bands, including attitude, subjective norms, and perceived behavioral control. (Rizzo & Columna, 2020)

Perceived User Engagement

Perceived user engagement is a multi-dimensional construct that encompasses various cognitive, affective, and behavioral factors. It involves three interrelated dimensions: motivation, involvement, and absorbed. (Ebrahimi et al. 2023) Motivation is driven by intrinsic or extrinsic factors, while involvement is influenced by relevance, personalization, interactivity, and immersion. (Borghouts et al. 2021) Perceived user engagement is a complex construct that plays

a crucial role in shaping the user's experience and behavior in the digital environment. (Oh & Kang, 2021) It involves multiple dimensions, determinants, and outcomes that need to be carefully considered and measured in the design and evaluation of digital interfaces and content. (Dvir, 2020) Perceived user engagement can be an important factor to consider in the study of fitness band adoption for swimmers, as it can enhance the user's motivation and commitment to using the fitness band regularly, influence the user's learning and performance outcomes from using the fitness band, and influence the user's satisfaction and loyalty towards the fitness band and the brand behind it. (Wei et al. 2022) It is important to measure and analyze perceived user engagement as a key determinant of adoption, usage, and outcomes to better meet the needs and expectations of swimmers and improve their engagement and satisfaction with the product. (Akram et al. 2022)

Perceived Visual Aesthetics

Perceived visual aesthetics is an important topic in psychology, as it involves understanding how individuals evaluate the visual appeal of objects and scenes. (Sauer & Sonderegger, 2022) Gestalt theory suggests that people perceive objects as a whole rather than individual parts, and symmetry is a key component of perceived visual aesthetics. (Wang et al. 2022) People tend to rate symmetrical objects as more aesthetically pleasing than asymmetrical objects due to their easier to process visually. Perceived visual aesthetics is a subjective experience that is influenced by a variety of factors. (Longstreet et al. 2021) It can be an important factor in the study of fitness band adoption, as it can influence how users perceive and interact with these devices. (Schrepp et al. 2021) Research has shown that users often value the aesthetic design of wearable technology devices, and that this can influence their adoption and usage behavior. In addition to influencing adoption and usage behavior, perceived visual aesthetics can also affect user satisfaction and enjoyment of the device, leading to increased physical activity and better health outcomes. (Ramezani& Shokouhyar, 2020) By understanding the role of aesthetics in wearable technology adoption, researchers can help to create products that are both functional and visually appealing, and that can help to improve health and wellness outcomes for users. (Dos-Santos et al. 2022)

Conceptual Framework

RQ1: What are the factors that impact swimmers' acceptance of fitness bands?

Perceived visual aesthetics is a subjective concept, but researchers have identified common characteristics that people associate with visual beauty. (Chung et al. 2023) Perceived visual aesthetics is complex and multifaceted, influenced by color, texture, complexity, order, and familiar elements. It can be an important factor in the study of fitness band adoption, as it can influence user perceptions and willingness to wear and use it regularly. (Velykoivanenko et al. 2021) Perceived visual aesthetics is an important factor in the study of fitness band adoption, as it can influence adoption and usage behavior, as well as user satisfaction and enjoyment. Swimmers who perceive fitness bands as useful may be more likely to use them consistently. (Pal et al. 2020)

RQ2: In what ways do these factors influence swimmers' inclination to use fitness bands?

Swimmers may find fitness bands useful for tracking their swimming performance and staying motivated to achieve their fitness goals, influenced by convenience, performance tracking, motivation, and social influence. (Attig& Franke, 2020) Swimmers' inclination to use fitness bands is influenced by convenience, performance tracking, motivation, social influence, and cost. (Fone& Tillaar, 2022) The proposed research framework is based on the TRAM model, which includes perceived user engagement and perceived visual aesthetics. (Perpetuini et al. 2021)

Data Analysis

Optimism - Fitness bands provide swimmers with a comprehensive overview of their overall fitness, including sleep patterns, stress levels, and progress towards fitness goals. It allows swimmers to gain insights into their overall health and fitness, which can help them make adjustments for better recovery time and a more effective training schedule. Fitness bands can help swimmers stay on track with their training program, set targets and track performance, and identify areas of improvement. It highlights the benefits of using fitness bands as a tool to stay motivated and engaged with training, while also providing valuable data and insights to optimize performance. The accuracy of fitness bands in tracking and recording data can vary depending on the quality of the device and how it is used. It emphasizes the need for swimmers to use a high-quality fitness band from a reputable brand, use it correctly, and calibrate it regularly to ensure accurate data. The use of technology is not a substitute for proper training and technique, and it should not be relied on solely for achieving fitness goals. It highlights the importance of proper training and technique in achieving fitness goals, and technology should be used as a tool to support and enhance training, rather than a substitute for it. The choice of whether or not to use the latest technology depends on the swimmer's goals and level of competition, and it is a personal choice that depends on the swimmer's preferences and budget. It emphasizes the need for swimmers to consider their personal goals, preferences, and budget before investing in the latest technology, and that technology should be used as a supplement to training, rather than a requirement for achieving fitness goals.

Innovation - Attitudes towards new technology vary among swimmers: The responses to the question show that some swimmers are early adopters of new technology, while others prefer to stick with tried and tested technology. This suggests that there is no one-size-fits-all approach to adopting new technology in the swimming community. Swimmers prioritize performance over novelty: Some swimmers adopt new technology early if it can give them a significant advantage over their competition, while others prefer to wait for reviews and feedback before investing in it. This indicates that swimmers prioritize performance over novelty when it comes to adopting new technology. Staying updated with the latest technology is crucial for professional swimmers: The responses to the question on staying updated with the latest technological advancements suggest that professional swimmers recognize the importance of staying informed about new technology to remain competitive. Swimmers have various ways of learning to use new fitness bands: The responses to the question on how swimmers would go about learning to use a new fitness band for swimming show that there are many ways to learn how to use a new device. This suggests that swimmers have a variety of resources available to them when it comes to learning new

technology. Swimmers rely on a variety of sources for technology updates and support: The responses to the questions on staying updated with the latest technology and learning to use new fitness bands indicate that swimmers rely on a variety of sources for technology updates and support, including coaches, fellow swimmers, customer support teams, and online forums. This highlights the importance of a supportive community in the swimming world.

Discomfort - Some respondents have found swimming-related technological devices to be too complicated to use. This indicates that manufacturers should aim for ease of use and simplicity in designing their devices to cater to a wider range of users. Opinions regarding privacy risks associated with using fitness bands are mixed. Manufacturers need to ensure transparency and implement robust data security measures to build trust among users and alleviate their privacy concerns. Respondents who are concerned about privacy risks associated with using fitness bands take steps to protect their data, such as limiting the amount of personal information they provide to the device. Manufacturers should provide options for users to control their personal data and ensure that data usage is clearly communicated to the user. Some users only use fitness bands from manufacturers with a proven track record of protecting user privacy. This highlights the importance of building brand reputation and establishing trust with swimmers. Some users continue to use their fitness bands despite concerns about the possibility of personal information extraction. This indicates that users value the benefits that fitness bands provide enough to continue using them despite potential privacy risks.

Insecurity - Some users are greatly concerned about unauthorized access to their fitness band data and take measures to protect their data, while others are not overly concerned and trust that their data is encrypted and secure. However, most users believe that fitness band manufacturers have a responsibility to protect user data and should be transparent about their data collection and sharing practices. Users have different attitudes towards the complexity of swimming-related technological devices. While some users find swimming-related technological devices too complicated to use, others do not. This could impact the adoption rate of new technology by swimmers. Fitness band users have different levels of confidence in their device's ability to transmit data accurately and securely. While some users trust that their fitness band manufacturer has designed their device to accurately and securely transmit data to the intended recipient, others take extra precautions to ensure that their data is transmitted as intended. Users have different strategies for learning how to use a new fitness band for swimming. Users may read the instruction manual, watch online tutorials, ask coaches or fellow swimmers, experiment during swims, hire a personal trainer or coach, join online forums or groups, attend workshops or seminars, contact the manufacturer or customer support team, or rely on trial and error to learn how to use a new fitness band for swimming. Users have different attitudes towards adopting new technology in swimming. While some swimmers are always on the lookout for new technology that can help them improve their performance, others prefer to stick with tried and tested technology. Some swimmers adopt new technology early if it can give them a significant advantage over their competition, while others prefer to wait for reviews and feedback before investing in it. Swimmers may also differ in their approach to keeping up with the latest technological advancements in swimming.

Perceived Ease of Use - The majority of respondents find fitness bands designed for swimming to be user-friendly and easy to use. This indicates that swimmer's satisfaction with the usability of fitness bands is generally high. Some participants find fitness bands designed for swimming intuitive and straightforward, while others require some practice to navigate. This suggests that the ease of use of fitness bands is influenced by individual factors, such as familiarity with technology and swimming experience. Respondents have varying levels of confidence in their ability to explain how a fitness band designed for swimming works to friends and family. This suggests that some users may require additional support or resources to fully understand the device's features and capabilities. A few participants had previous experience explaining the workings of fitness bands to friends and family and found that it was generally well-received and understood. This indicates that some users may be advocates for fitness bands and may have the ability to educate others about their benefits. The varying responses to explaining how a fitness band designed for swimming works highlights the importance of providing clear and accessible documentation and support resources for users. This can help users better understand the device's features and capabilities and ultimately lead to higher user satisfaction.

Perceived Usefulness - The responses indicate that fitness bands can be used for various health and wellness purposes beyond just swimming, such as tracking daily steps and activity levels, monitoring heart rate during other exercises, tracking sleep patterns, nutrition goals, reminding individuals to take breaks from sitting, tracking progress towards fitness goals, monitoring stress levels, tracking water intake, tracking menstrual cycles, and monitoring skin temperature and exposure to UV radiation during outdoor activities. The use of fitness bands during swimming can have a positive impact on a swimmer's journey, such as tracking progress towards goals, identifying areas of weakness in technique, and providing insights on how to improve. The ease of use of fitness bands designed for swimming depends on various factors, including the specific device's features, the user's swimming experience and familiarity with technology, and their individual preferences. However, the majority of respondents find fitness bands designed for swimming to be user-friendly and easy to use, with some finding them intuitive and straightforward. Some respondents express concerns about privacy risks associated with using fitness bands, such as government or company extraction of personal information from fitness bands. However, others trust that manufacturers have appropriate measures in place to safeguard their data, and some users only use fitness bands from manufacturers with a proven track record of protecting user privacy. Responses vary on whether users are confident that information provided with a fitness band will reach the intended recipient. Some users express confidence in the device's technology and trust that fitness band manufacturers have designed their devices to accurately and securely transmit user data to the intended recipient. Other users take extra precautions to ensure that their data reaches the intended recipient, while some users are not overly concerned about this issue.

Perceived User Engagement - Enjoyment is a significant factor for using fitness bands while swimming as respondents find that using fitness bands while swimming helps maintain motivation and engagement in their workouts. Accuracy, reliability, and safety are priorities for respondents and they prioritize these factors when using fitness bands during swimming to ensure that they are getting the most accurate data possible and that the device is reliable and safe

to use. Mixed experiences with purchasing and using fitness bands for swimming are faced by the respondents. While some respondents have had positive experiences with fitness bands for swimming, others have not considered them or have had negative experiences in the past. The respondents are interested in learning more about fitness bands for swimming. Some respondents are interested in learning more about fitness bands for swimming but want to do more research before making a decision. Fitness bands can provide insights to improve swimming technique as respondents suggest that fitness bands can help identify areas of weakness in technique and provide insights on how to improve, highlighting the potential benefits of using fitness bands for swimming.

Perceived Aesthetics - Sleek, waterproof, versatile, and lightweight design is highly appreciated in fitness bands designed for swimming. The respondents prefer fitness bands with designs that are waterproof, lightweight, and versatile, allowing for use in different swimming environments. The sleek design of these fitness bands is also highly appreciated by the respondents. Easy-to-use buttons and screens, interchangeable bands, and long battery life are important design features. The respondents highlighted the importance of fitness bands with easy-to-use buttons and screens, as well as interchangeable bands that can be replaced as needed. A long battery life is also highly valued, allowing for uninterrupted use during longer swimming sessions. Additional features such as built-in GPS or heart rate monitoring are desired. Some respondents suggest that additional features such as built-in GPS or heart rate monitoring would enhance the functionality of fitness bands for swimming. Comfort, security, and adjustability of the wrist straps are important considerations. Respondents emphasized the importance of the wrist strap design of fitness bands for swimming, stating that it should be comfortable, secure, and adjustable to fit different wrist sizes. Functionality and ease of use with intuitive controls and a clear display should be prioritized in the design of fitness bands for swimming. Finally, the respondents suggest that the design of fitness bands for swimming should prioritize functionality and ease of use, with intuitive controls and a clear display to enable users to easily navigate and access the device's features while swimming.

Use Intention - Participants expressed interest in using a fitness band for swimming, with some citing its potential to help track progress and set goals. This suggests that fitness bands may be a useful tool for swimmers who are looking to improve their performance. Some participants were undecided about using fitness bands for swimming, indicating a need for more information about available options and their features. This highlights the importance of providing clear and comprehensive information to potential users. Personal preferences and goals were important factors in whether participants recommended fitness bands to other swimmers, suggesting that individual needs should be considered when deciding whether to use a fitness band. Mixed experiences with fitness bands for swimming were reported, with some finding them helpful and others finding them distracting or uncomfortable. This underscores the importance of finding the right option that meets one's individual needs and preferences. The importance of accuracy, reliability, and safety was emphasized by some participants, highlighting the need for high-quality and reliable fitness bands designed specifically for swimming.

Conclusion

The study examined various factors that impact the acceptance and intention to use fitness bands by Indian swimmers. The conceptual framework, which includes technology readiness, centrality, optimism, discomfort, insecurity, perceived ease of use, perceived usefulness, perceived user engagement, and perceived visual aesthetics, was used for analysis. The study found that there was a strong correlation between technology readiness and technology acceptance across different aspects, although the importance of centrality is debatable. Optimism was found to be a crucial factor, as it had a significant positive correlation with the acceptance of fitness bands. Innovation was found to potentially impact swimmer acceptance of fitness bands, but this was not confirmed by the collected data. Swimmers did not report any discomfort in using fitness bands and were confident in their ability to troubleshoot any issues that arose. In terms of insecurity, most swimmers had confidence in fitness band technology and expected it to work as intended, indicating a strong correlation with acceptance. Perceived ease of use emerged as a significant factor, with almost all swimmers expressing frustration with handling on a limited display. Perceived usefulness, user engagement, and perceived visual aesthetics were all important factors in swimmers' acceptance of fitness bands. The study concluded that optimism had a direct relation to intention to use, as swimmers believed that if any revolutionary training aspect was invented, it could significantly impact their daily lives. Innovation and discomfort did not play a central role in swimmers' acceptance of fitness bands, but it is still unclear how they affect their intention to use the fitness band. The research findings suggest a positive correlation between the factors determining the acceptance of fitness bands and swimmers' intention to use.

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Appendix

Optimism

1. In what ways do you think Fitness Band technology impacts a swimmer's daily routine?
2. Do you believe it's essential for swimmers to use the latest available technology?
3. Do you trust that a fitness band will accurately execute your instructions?

Innovation

4. Are you an early adopter of new technology among your circle of swimmer friends?
5. Do you stay updated with the latest technological advancements in the field of swimming?
6. If you were to obtain a new fitness band for swimming, how would you learn to use it?

Discomfort

7. Have you ever found a swimming-related technological device to be too complicated to use?
8. What are your thoughts on the possibility of the government or companies extracting personal information from a fitness band?

Insecurity

9. Does the prospect of others accessing the information sent with a fitness band concern you?
10. Are you confident that provided information with fitness band will reach intended recipient?

Perceived Ease of Use

11. How would you describe the ease of use of a fitness band designed for swimming?
12. Would you be able to explain to friends and family how a fitness band designed for swimming works?

Perceived Usefulness

13. Besides swimming, for what other purposes would you utilize a fitness band?
14. How could the use of a fitness band impact your swimming journey?

Perceived User Engagement

15. How significant of a factor is enjoyment when using a fitness band while swimming?
16. Have you ever considered purchasing a fitness band for swimming or learning more about it?

Perceived Aesthetics

17. What are your general thoughts on the design of a fitness band with regards to swimming?

Use Intention

18. Do you lean towards using a fitness band for swimming based on available information?
19. Would you strongly recommend a fitness band to other swimmers?
20. How likely are you to recommend a fitness band to other swimmers based on your experiences?