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# A Study on Customer Perception and Attitude Towards Wearable Technologies with Special Reference to MI Fitness Brand

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**ABSTRACT**

Wearable technology has become one of the fastest-growing innovations in the digital era, combining technology with everyday lifestyle. Among various wearable devices, fitness bands play a crucial role in promoting health awareness and self-monitoring. This study focuses on understanding customer perception and attitude towards Mi Fitness Bands. It aims to identify factors influencing the purchase decision, such as brand image, features, price, and usability

KEYWORDS: Wearable Technology, Customer Perception, Attitude, Mi Fitness Band, Smart Devices.

## INTRODUCTION

In the modern mechanical world the chance for physical activities is less because of new inventions. Technology has penetrated into every aspect of modern life. Sports are no exception. Science applied to sports has enabled modern youth to develop physical capacities beyond anything imagined earlier. The participation in physical activity is the compensation to maintain good health.

Now-a-days the use of smartphones has increased tremendously. As a result, use of smartphone compatible devices such as smart watches, pedometers, activity or fitness trackers have also increased. Despite the fact that physical fitness has been a serious concern with the people of India since pre-historic times, the western writers have been very partial in high-lighting this irrepressible tmth in the world history of physical education. When Europe was still enveloped in the abyss of darkness, the ancient Hindu culture had realized that the salvation of mankind lay in being healthy and fit. TheHindu sages believed in the Vedic aphorism " that all be happy and healthy". The texts of Ayurveda (science of health and longevity) and Yoga (union of the human soul with Supreme soul) were written in India much before Hippocrates and Galen wrote treatises on health, exercise, fitness and medicine.

## STATEMENT OF THE PROBLEM

The retail segment in electronics has evolved into the online consumer devices segment. The online products have taken over the traditional market. The market is matured with entry of varied e-products available at every price point. There are many fitness and wellness apps competing in the retail market with standalone products like online fitness bands. The competition is fierce and the consumer is benefited with wide options to choose from. It will be interesting to study how a consumer perceives these online fitness wellness products and apps.

## OBJECTIVES OF THE STUDY

- To study the socio economic profile of the respondents.
- To study the customer preference towards MI Fitness Band.
- To study the factors influencing the satisfaction level.
- To suggest measures to improve the satisfaction level of customers.

## SCOPE OF THE STUDY

The study focuses on understanding customer perception and attitude towards wearable technologies, with special reference to the MI fitness brand. It examines how consumers view the usefulness, design, features, and affordability of MI fitness products. The study also aims to identify factors influencing the buying behavior and satisfaction level of users. The findings will help the company improve its marketing strategies and product quality to meet customer expectations effectively.

## RESEARCH METHODOLOGY

The validity of any research depends on the systematic method of collecting the data and analyzing the same in a logical and sequential order. In the present study, an extensive use of both primary and secondary data was made.

## RESEARCH METHOD

Research methodology is a way to systematically solve research problems. It may be understood as a science of studying how research is done scientifically. It includes the
overall research design, the sampling procedure, data collection method and analysis procedure.

## RESEARCH DESIGN

The Research design used in this study was descriptive research design. It includes surveys and fact-finding enquiries of different kinds. Data has been collected from both primary and secondary sources.

## SAMPLING METHOD

The sampling used for the study is convenient sampling. This sampling is selected by the researcher for the purpose of convenience to access.

## SAMPLING SIZE

The study was conducted with 87 MI consumers in Coimbatore District.

## METHOD OF DATA COLLECTION

The data for this study are of two types: -

- Primary data
- Secondary data

## STATISTICAL TOOLS

The following statistical tools are used in the study

- Percentage Analysis
- Chi-Square test

## AREA OF THE STUDY

The sample area chosen for conducting the study was Coimbatore district.

## LIMITATIONS OF THE STUDY

- The study has been restricted to the users of MI Fitness Bands only.
- The survey is restricted to 100 respondents.
- Lack of consumer awareness about different Fitness Bands.
- The sample size is supposed to be representative of the views of the consumers.
- The study has been restricted to Coimbatore district only.

## REVIEW OF LITERATURE

1. Raghavan (2020) conducted a study on the consumer adoption of wearable devices and found that perceived usefulness and ease of use significantly affect consumer acceptance of fitness bands.
2. Priya and Karthik (2021) analyzed customer satisfaction towards Mi smart bands and discovered that affordability and feature efficiency are key factors driving consumer loyalty.
3. Sanjay & Meera (2022) highlighted that wearable technologies are becoming lifestyle products and not just fitness tools, with younger demographics showing higher adoption rates.
4. Kumar and Devi (2023) studied the impact of brand trust on wearable device usage and concluded that continuous product innovation and service quality enhance customer confidence and long-term usage.

## OVERVIEW OF THE STUDY

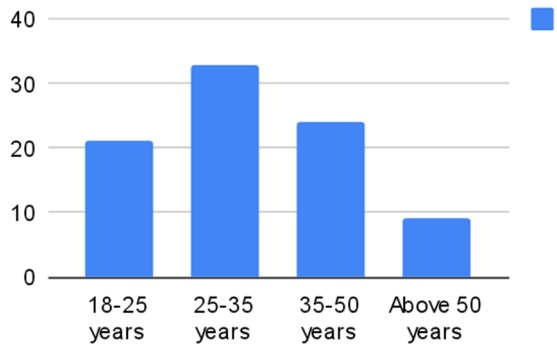
  

The rapid advancement of technology has transformed the way people monitor their health and fitness. Wearable technologies, especially fitness bands, have become integral to modern life by providing real-time data on health metrics such as steps taken, calories burned, and heart rate. Mi Fitness Bands, produced by Xiaomi, have captured a significant portion of the market due to their affordability, accuracy, and user-friendly design. Understanding customer perception and attitude towards such products is essential for evaluating their success and identifying areas of improvement. This study focuses on examining how customers perceive Mi Fitness Bands in terms of performance, reliability, design, and price. It also explores customer attitudes, satisfaction levels, and intentions to recommend the product to others. The research emphasizes the role of wearable technology in shaping health-conscious lifestyles and highlights how positive perception and attitude can contribute to brand loyalty and sustained market growth.

**DATA AND INTERPRETATION**

**TABLE SHOWS AGE OF THE RESPONDENTS**

| AGE | NO.OF.RESPONDENTS | PERCENTAGE |
|---|---|---|
| 18-25 years | 21 | 24.14% |
| 25-35 years | 33 | 37.93% |
| 35-50 years | 24 | 27.59% |
| Above 50 years | 9 | 10.34% |
| **Total** | **87** | **100** |

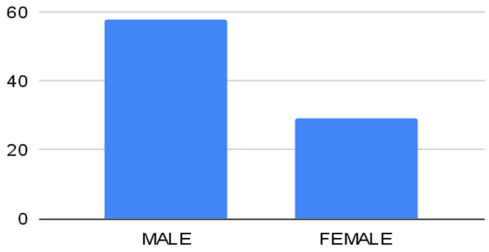



**INTERPRETATION**

From the table it is known that, among the respondent under this study, 24.14% of the respondent are belong to the age group between 18-25 years, 37.93% of the respondents are belong to the age group between 26-35 years, 27.59% of the respondents are belong to the age group between 36-50 years and the remaining 10.34% of the respondents are belong to the age group of above 50 years.Most of the respondents belong to the age group between 25-35 years.

**TABLES SHOWS LEVEL OF SATISFACTION OF RESPONDENTS**

| GENDER | NO.OF.RESPONDENTS | PERCENTAGE |
|---|---|---|
| MALE | 58 | 66.67% |
| FEMALE | 29 | 33.33% |
| **TOTAL** | **87** | **100** |




**INTERPRETATION**

Among the 87 respondents, 66.67% of the respondents are male and the remaining 33.33% of the respondents are female.The majority of the respondents are male.

**CHI SQUARE**

Table : Observed Frequencies for Age Group and Fitness Band Usage

| Usage Frequency | Daily | 4 - 6 times | 1 - 3 times | Rarely | Total |
|---|---|---|---|---|---|
| Under 18 | 8 | 4 | 6 | 3 | 21 |
| 18 - 30 | 6 | 7 | 15 | 5 | 33 |
| 30 - 50 | 4 | 9 | 5 | 6 | 24 |

| | | | | | |
|---|---|---|---|---|---|
| 50 & above | 2 | 4 | 2 | 0 | 8 |
| Total | 20 | 24 | 28 | 14 | 87 |

**INTERPRETATION**

The most frequent usage overall is 1 - 3 times a week (32.6%), while the largest age group is 18 - 30 (38.4%). The "Under 18" group shows the highest rate of Daily usage (8/21 or 38.1% within their group).

H_0 (Null Hypothesis): There is no relationship between age group and the frequency of MI fitness band usage (Independent).

H_1 (Alternative Hypothesis): There is a relationship between age group and the frequency of MI fitness band usage (Dependent).

| Observed (O) | Expected (E) | (O-E)^2/E |
|---|---|---|
| 8 | 4.88 | 1.9885 |
| 4 | 5.86 | 0.5906 |
| 6 | 6.84 | 0.1025 |
| 3 | 3.42 | 0.0513 |
| 6 | 7.67 | 0.3653 |
| 7 | 9.21 | 0.53 |
| 15 | 10.74 | 1.6857 |
| 5 | 5.37 | 0.0258 |
| 4 | 5.58 | 0.4481 |
| 9 | 6.7 | 0.7914 |
| 5 | 7.81 | 1.0134 |
| 6 | 3.91 | 1.1213 |
| 2 | 1.86 | 0.0105 |
| 4 | 2.23 | 1.3992 |
| 2 | 2.6 | 0.1404 |
| 0 | 1.3 | 1.3023 |
| 87 | 87 | 11.5662 |

**RESULT**

Calculated Chi-Square 11.5662

Degrees of Freedom (df) =9

Chi-Square Value (significance level=0.05, df=9) 16.919

The calculated Chi-Square value (11.5662) is less than the Chi-Square table value (16.919).

Conclusion: The null hypothesis is accepted. Hence, there is no statistically significant relationship between the age group of the respondent and the frequency of MI fitness band usage at the 0.05 significance level.

Table : Observed Frequencies for Monthly Income and Upgrade Intention

| Monthly Income | Yes (Upgrade) | No (No Upgrade) | Total |
|---|---|---|---|
| Below 10000 | 27 | 4 | 31 |
| 10001- 30000 | 30 | 3 | 33 |
| 30001 - 50000 | 13 | 2 | 15 |
| 50001 & above | 6 | 1 | 7 |
| Total | 76 | 10 | 87 |

**INTERPRETATION**

The vast majority of respondents ({88.4\%}) across all income groups indicated that they would

consider upgrading to a newer model in the future, suggesting a high level of brand satisfaction and willingness to purchase again. The largest group is the 10001- 30000 income bracket.

H_0 (Null Hypothesis): There is no relationship between monthly income and the intention to upgrade to a newer model.

H_1 (Alternative Hypothesis): There is a relationship between monthly income and the intention to upgrade to a newer model.

| O | E | (O-E)^2/E |
|---|---|---|
| 27 | 27.35 | 0.0045 |
| 4 | 3.6 | 0.0444 |
| 30 | 29.16 | 0.0232 |
| 3 | 3.84 | 0.1804 |
| 13 | 13.26 | 0.0051 |
| 2 | 1.74 | 0.0381 |
| 6 | 6.19 | 0.0057 |
| 1 | 0.81 | 0.0432 |
| 87 | | 0.3446 |

**RESULT**

Calculated Chi-Square Value 0.3446

Significance Level : 0.05

Degree of Freedom (df): 3

The Calculated Chi-Square value (0.3446) is less than the Chi-Square table value (7.815). The P-value is 0.9515, which is much greater than 0.05.

Conclusion: The null hypothesis H_0 is accepted. Hence, there is no statistically significant relationship between a respondent's monthly income and their intention to upgrade to a newer model in the future. The differences in upgrade intention observed across income groups are trivial and likely due to random chance.

**FINDINGS**

1. Majority of the respondents are Male (66.67%).
2. Majority of the respondents are Students (50.6%).
3. Majority of the respondents report a monthly income of Below ₹10,000 (40.7%).
4. Majority of the respondents were motivated by Health Tracking to start using a fitness band (35.4%).
5. Majority of the respondents are currently using the Band 8 model (43.2%).
6. Majority of the respondents find Step Tracking to be the most valuable feature (38.6%).
7. Majority of the respondents use their MI fitness band 1–3 times in a typical week (34.5%).
8. Majority of the respondents feel the positive impact on their lifestyle is Improved Physical Health (39.8%).
9. Majority of the respondents purchased based on a recommendation (83.1%).
10. Majority of the respondents feel Online Reviews influence their purchasing decisions slightly (32.1%).
11. Majority of the respondents would like to see Integration with other devices/apps in future models (33.3%).
12. Majority of the respondents would consider upgrading to a newer model in the future (91.6%).
13. Majority of the respondents are Neutral regarding the overall performance satisfaction (42.9%).
14. Majority of the respondents rate the Data Accuracy as Moderately Accurate (39.3%).
15. Majority of the respondents find the Design and Aesthetics to be As Expected (42.9%).
16. Majority of the respondents are Neutral regarding battery life satisfaction (48.8%).
17. Majority of the respondents rate the User Interface and Ease of Use as Neutral (40.5%).
18. Majority of the respondents have a primary concern regarding the Accuracy of Data (32.1%).
19. Majority of the respondents are Satisfied with the Customer Support provided by MI (40.5%).

20. Majority of the respondents are Likely to Recommend the MI Fitness Band (33.7%).
21. Majority of the respondents would purchase another MI Fitness Band in the future (67.9%).

## SUGGESTIONS

The people are suggesting that the company should stick to the quality. As though people are highly satisfied with the MI Fitness Bands they have given suggestions for improvement that consist of introducing more varieties and reducing the cost. This makes the people to increase their purchasing power and increase their interest towards MI. Customers of MI Fitness Bands are well known about the product range provided by the brand. From the survey it is clear that the majority of the customers were young people and the advertisements, products offered by MI Fitness Bands exactly match the demand of youth. This makes MI Fitness Bands ahead of its competitors

## CONCLUSION

On the growing influence of globalization on the Indian Fitness Band industry, a number of global manufacturers are coming into the Indian Fitness Band industry. In such a
dynamic environment MI need to be more quality conscious since the products offered are almost similar by all the Fitness Band manufacturers in the industry. MI needs to take serious efforts to make itself competitive and stable in the dynamic market situation by focusing on the service quality aspects.

## BIBLIOGRAPHY

1.Dr.S.Shanmugapriya and D.Kavya (2018), "A Study on Customer Preference and Buying Behaviour towards Branded Fitness Bands in Coimbatore District", Suraj Punj
Journal For Multidisciplinary Research, Volume 8, Issue 12, pp.285-297.
2.S.Kubendran and M.V.Deepak Rajagopal (2018), "A Study on Consumer Satisfaction in MI Showroom, Tiruppur", International Journal of Current Engineering and Scientific Research (IJCESR), Volume-5, Issue-4, pp. 37-42.
3.D.Arthi and M.Sindhu (2018), "Impact of Demographic Variables on Customers' Preference towards Wrist Fitness Bands in Paavai Educational Institutions at Namakkal", International Journal of Innovative Research in Management Studies (IJIRMS),Volume 3, Issue 5,pp. 01-04