

A Study on the Women Consumer's Attitude towards Health Fitness Equipments – A Study with reference to Madurai City

K. Navarathinam

ABSTRACT

In olden days every women had a healthy diet with high nutritional value. They use to eat more nutritional foods including pulses, cereals, raw vegetables and high protein foods. Their daily routine work at home itself gives physical exercises to their body. But now a day's women have less physically demanding work which leads to prevalence of obesity, weight gain and other health related problems. Health plays an important role in everybody's life. Now a days, the concept of being healthy has traversed age and sex bars with both men and women becoming increasingly health conscious. The benefits of proper nutrition and exercise are important issues for women. With the number of individuals who are overweight and / or obese is on the rise; weight loss and weight management programs are increasing in popularity. So, the researcher has chosen this topic to identify the major motivating factors towards fitness products and to find out the women consumers attitude towards fitness products.

Key words: *Health, Physical exercise, nutrition, obese, weight management*

Introduction

In olden days women were only interested to cook, clean, wash clothes, take care of the children and the elderly, take care of the sick of the family, jar food for future meals and collect firewood and so on. They were not interested to do inventing in those days. In olden days married women's lives revolved to a large extent around managing the household. Moreover in those days women were expected to have more children. Women during the 18th century were acknowledged as nothing more than housewives. Their food habits were health-oriented, with high nutrition value. So, they were in good health those days without the need for any additional exercises.

The world of women is no longer confined to household activities. Today, they actively contribute to the promotion of economic development in different

capacities. Women are participating in all spheres of activities. The fact remains that women are the citadel of excellence in the academic field, politics, administration of business and so on. Nowadays women have entered all walks of life. To them, work is a necessity particularly in these days of spiralling prices. When even a simple meal and shelter cannot most often be assured for a whole family with the earnings of a single member, the need arises for the women to seek employment. Most of the women workers come for work to tide over their economic difficulties and supplement their family income. Anyhow, employment of women is a very essential one. Pandit Jawaharlal Nehru once said, "In order to awaken the people, it is the women who have to be awakened. Once she is on move, the family moves, the village moves and the nation moves."

Urban women play a significant role in the domestic and socio – economic life in the society. In India, over the years, both female and male roles have been changing. Many women are placing an increasing value on independence and the freedom to do what they want. Being aware of the dual responsibility at home and office, working wives are pressurized for time. As they enjoy economic freedom, it may appear that they make independent decisions. More women are also rejecting traditional roles related to submissiveness and home making. The rise in the importance of information technology has given rise to a variety of new professions. They have spawned a taste for a cosmopolitan lifestyle among the emerging middle class. Break up of joint families and greater urbanization has increased the dependence on household appliances and labour – saving gadgets. In this scenario, women are becoming more visible in the markets and are emerging as the new decision makers at home.

Nowadays, women are very busy with too many commitments. So they are affected by tension and stress. Stress is one of the major causes of illness. The effects of stress have a major impact on women's health. A regular exercise reduces the mental tension. Their food habit has also changed. They eat excess of fast food, Junk foods, sweets and foods which lack nutritional value. Due to all these changes in their lifestyle they are affected by many health related problems like heart disease, strokes, diabetes, obesity and cancer. Obesity is a chronic disease which is a major health problem. High-calorie, low-nutrient snacks and beverages, bigger portions of food, and less-active lifestyles are all contributing to the obesity epidemic. So, physical fitness and regular exercises are necessary for maintaining women's health.

Today's women hold double responsibilities. Women folk do not have opportunity to spare their white collared jobs as well as their domestic responsibility. Their level of interest to take care of their health, time and opportunity to pursue that and their affordability to go for that is not uniform for women of all works of life. So many opportunities like yoga, walking, jogging, skipping, playing and other work – outs with or without fitness equipments are available now. Each and every method is chosen by the women by considering so many variables like family situation, age, living place, office timings, affordability, shyness etc. But, the initial participation in fitness activities is related to motives associated with weight control, achievement, self – control, self – confidence and stress relief.

Statement of the Problem

There was a time in this world when the need to lose weight was completely unheard of. People ate well, but they worked well too. They woke up early in the morning and then engaged in a whole day's work. This work was mostly physical labour. People worked on fields digging, sowing, and harvesting. They tilled the soil, rode horses, worked on farms and ranches. The result was that they could afford to eat almost anything they wanted in whatever quantities they wanted. But that was ages ago. The world has changed so much since those days. The lifestyle of women has changed now. Lifestyles have changed so much and the comforts and facilities have increased so much.

Worldwide there has been a large shift towards less physically demanding work except the fields of agriculture and construction work. This has been accompanied by increasing use of mechanized transportation, e.g. a greater prevalence

of labor saving technology in the home, and less active recreational pursuits e.g. watching television. Present day's people use to go from one place to another place by using their own two wheelers, four wheelers or they prefer to go by auto rickshaws or buses. The walking habit of the people has reduced to a large extent these days.

As most of the women are employed now, a part of their daily work at home has been done by the servants. Moreover because of the development of science and technology they enjoy the benefits of grinders, mixer grinders, washing machines, gas stoves etc...which helps them to do their work easier and faster without giving any physical strain to their body. Few have recognized television viewing as a significant lifestyle factor. Yet, next to sleep and work, watching TV consumes more time than any other activity. Frequent television viewing may function as a risk factor in a number of disorders and health problems may result from many hours of daily TV watching. As a result of all these comforts and amenities, the state of physical well being has really changed. Most of us have sedentary jobs that demand little or no exercise at all. So, weight gain has become a major concern for almost every city dweller.

Recently, there is a change in the attitude of the people towards fitness and healthy body. The concept of "well being" has taken new dimensions in the city. The number of people frequenting fitness centers and health clubs is on the rise. Earlier, it was only the youth who sweated out in gymnasiums for a well-toned body. Today the situation has changed. It is not just body builders but those who wish to burn that extra fat too who have become regulars at fitness centers. These days even couples frequent fitness centers. Today most of the people do exercises as a habit to keep

their weight under control. Also, a lot of people join gym purely because doing a work – out is considered trendy.

The most obvious reason for the women to go for fitness center is for weight loss, for health reasons as well as simply to feel and look better. Awareness about the dangers of excess weight has also increased over the years and this is another reason why so many women are prepared to put a great deal of effort and commitment into losing weight and getting fit. Women today may be gaining weight because of unhealthy food choices like fast food and family habits like eating in front of the television instead of around a table. Women of present day lack physical exercises due to the change in their lifestyle. So they are in need of going to gym and health clubs in order to give physical exercises to their physique and to maintain a good health. So, gym attendance has become an important part of many consumers' lives.

Medical science continues to point to the indisputable benefits of regular exercise and managing a healthy diet in the prevention of disease. Exercise helps to keep ailments due to unhealthy food habits and sedentary life styles at bay. But in this busy life due to the time constraint most of the women are unable to undertake exercise in the gym. This situation intruded the researcher to do a study on the above topic.

Literature Review

Daniel M Landers (2004) in his article "The influence of exercise on mental health" have evidence to support the claim that exercise is related to positive mental health as indicated by relief in symptoms of depression and anxiety.

Marku S Gerber and Uwe Puhse (2007) in their article "Do exercise and fitness protect against stress?" concluded that people with

high exercise levels exhibit less health problems when they encounter stress.

J. Jolliffe and Dr. R. Taylor (2009) in their article "Exercise and Physical activity for older adults" suggested that all older adults should engage in physical activity and avoid an inactive lifestyle.

Janssen and Leblanc (2010) in their article "Health benefits of fitness in school-aged children and youth" stated that the more physical activity, the greater the health benefits. They also suggested that children and youth of 5 – 17 years of age should accumulate an average of at least 60 minutes per day and up to several hours of at least moderate intensity physical activity.

George A Bray (2010) in his article "Role of physical activity and exercise in obesity" proved that physical activity and exercise are very good treatment for obesity.

Scope of the Study

The study will be useful for the fitness centres and for the dealers of the fitness equipments to know about the consumer attitude towards fitness equipments. The study will also be helpful to know the various motivating factors towards fitness products.

Objectives

1. To identify the motivating factors towards health fitness products.
2. To analyze the attitude of women consumer's towards health fitness equipments.

Hypotheses

Based on the objectives of the study, the following hypotheses are framed:

1. There is a significant relationship between the family income of the respondents and the amount of importance assigned to price while

purchasing the fitness equipments.

2. There is a significant relationship between the educational qualification of the respondents and the major sources of influence to purchase the fitness equipments.
3. There are significant changes felt by the respondents before and after doing the exercises.

Research Methodology

This study is a fact gathering expedition assuming the characteristics of both exploratory and descriptive research. As an exploratory research, it would be useful in familiarizing the various fitness equipments available for doing the fitness exercises, in developing hypotheses and in establishing priorities for further research related to the Fitness Industry.

The study assumes descriptive nature as it attempts to describe the characteristics of certain groups, to estimate the proportion of people in a specified population who behave in a certain way and to make specific predictions.

The study aims at developing a complete and accurate description of the problem selected. It also attempts to provide quantitative evidence to the findings to the extent possible.

The study is based on both primary and secondary data. To ascertain the women consumer's attitude towards Health Fitness Equipments, information was collected from the selected respondents with the help of a comprehensive interview schedule i.e. questionnaire which forms the primary data. Convenience sampling method is used to select the respondents. The sample size for the study is 500.

In this study, the data were analyzed by using statistical tools like Mean, Standard deviation, Chi-square test, Mc Nemer test, Garrett ranking method, Ranking method, Association test, Semantic Differential Scale and Simple percentage analysis.

Analysis

Garrett Ranking Method

The researcher has used the Garrett's ranking method to identify the factors which motivated the respondents to use the fitness products.

Table 1:
Motivating Factors towards
Fitness Products

Sl. No	Motivating Factors	1	2	3	4	5	6	7	8	9	10	Total
1.	Desire to be healthy always	101	94	113	66	41	26	24	13	14	8	500
2.	To reduce obesity	100	107	85	46	88	26	28	10	7	3	500
3.	Advertisements	2	11	23	37	46	33	68	73	110	97	500
4.	Motivation from family members	3	26	21	43	42	45	81	64	95	80	500
5.	Motivation from friends	61	75	54	51	44	41	56	33	45	40	500
6.	Weight reduction	133	74	80	101	37	21	32	7	9	6	500
7.	Stress reduction	24	38	41	45	73	92	56	62	37	32	500
8.	Doctor's advice	65	63	35	74	54	88	40	42	13	26	500
9.	To maintain beauty	2	14	34	20	53	64	75	87	97	54	500
10.	To maintain BMI	1	6	14	17	22	64	40	109	73	154	500
	Garrett's Table Value	81	70	63	58	52	48	42	37	29	18	

Source: Primary data

Table 2:
Garrett Score for the Motivating Factors

Sl. No	Motivating Factors	1	2	3	4	5	6	7	8	9	10	Garret score
1.	Desire to be healthy always	8181	6580	7119	3828	2132	1248	1008	481	406	144	31127
2.	To reduce obesity	8100	7490	5355	2668	4576	1248	1176	370	203	54	31240
3.	Advertisements	162	770	1449	2146	2392	1584	2856	2701	3190	1746	18996
4.	Motivation from family members	243	1820	1323	2494	2184	2160	3402	2368	2755	1440	20495
5.	Motivation from friends	4941	5250	3402	2958	2288	1968	2352	1221	1305	720	26405
6.	Weight reduction	10773	5180	5040	5858	1924	1008	1344	259	261	108	31755
7.	Stress reduction	1944	2660	2583	2610	3796	4416	2352	2294	1073	576	24304
8.	Doctor's advice	5265	4410	2205	4292	2808	4224	1680	1584	377	468	27313
9.	To maintain beauty	162	980	2142	1160	2756	3072	3150	3219	2813	972	20426
10.	To maintain BMI	81	420	882	986	1144	3072	1680	4033	2117	2772	17187

Table 3:
Garrett Ranking Selection Factor Results

Motivating factors	1	2	3	4	5	6	7	8	9	10
Average score	62.25	62.48	37.99	40.99	52.81	63.51	48.61	54.63	40.85	34.37
Ranks	III	II	IX	VII	V	I	VI	IV	VIII	X

From Table 3, it is inferred that factor 6 receives the first rank with a highest average score of 63.51. So, the major motivating factor for the respondents to use the fitness products is **weight reduction**. Next to that factor 2 i.e. to reduce obesity receives the second rank with average score of 62.48, followed by factors like desire to be healthy always, doctors advice, motivation from friends, stress reduction, motivation from family members, to maintain beauty, advertisements and to maintain BMI which receives ranks 3, 4, 5, 6, 7, 8, 9 and 10 respectively.

Ranking Method

Respondents' preference towards fitness exercise equipment is identified by means of ranking method in terms of five factors.

The respondents are asked to rank the various factors according to their order of preference while purchasing the fitness equipment. Then weights are assigned for each rank and the mean value is calculated. The factor which receives the highest mean value is assigned the rank one; the next factor with the highest mean value is assigned the rank two and so on. The resulted mean value and the ranks are presented in Table 4.

Table 4:
Respondents Preference towards
Fitness Exercise Equipment

Sl.No	Factors	1	2	3	4	5	$\Sigma f x$	No of Respondents	Mean	Rank
1.	Equipments that are easy to use	86	114	92	118	90	1488	500	2.98	III
2.	Equipments that occupy less space	12	67	87	204	130	1127	500	2.25	IV
3.	Equipments that are easy to carry	24	40	124	97	215	1061	500	2.12	V
4.	Equipments that require less maintenance	201	143	95	38	23	1961	500	3.92	I
5.	Equipments that operate without power	177	136	102	43	42	1863	500	3.73	II

Source: Primary data

From table 4, it is revealed that among the five factors, majority of the respondents

preference is for the equipments that require less maintenance that receives the first rank with a mean value of 3.92, equipments that operates without power receives the second rank with a mean value of 3.73, followed by the equipments that are easy to use, equipments that occupies less space, and equipments that are easy to carry with mean values of 2.98, 2.25 and 2.12 respectively.

Semantic Differential Scale

The semantic differential scale is used to find out the consumer attitude towards fitness equipments. The semantic differential is a 7 – point rating scale with end points associated with bipolar labels that have semantic meaning. Here, semantic differential scale is used to measure the women consumer's attitude towards fitness equipments by having a series of descriptive scales bounded at each end by one of two bipolar adjectives. The respondents has to mark (X) the blank that best indicates how accurately one or the other adjective describes what it means to them. The person's attitude score would be the sum of the numbers corresponding to the positions checked on the individual subscales or average.

Fitness equipments are:

Good: 43 : 216 : 119 : 81 : 12 : 27 : 2 : Bad

Useful: 65 : 247 : 132 : 53 : 0 : 3 : 0 : Useless

High Priced: 196 : 161 : 63 : 47 : 23 : 10 : 0 : Low Priced

Comfortable: 69 : 103 : 86 : 195 : 31 : 14 : 2 : Uncomfortable

Easy to operate: 71 : 115 : 213 : 65 : 32 : 0 : 4 : Difficult to operate

From the above scale, it is understood that the consumers overall attitude towards the fitness equipments are “good, useful, very high priced, neither comfortable nor uncomfortable and somewhat easy to operate”

Chi-square Test

Hypothesis: There is A significant relationship between the family income of the respondents and the amount of importance assigned to price while purchasing fitness equipments.

Table 6:
Relationship between Family Income
and the Importance to Price

Family Income/ Month (in Rs.)	Very Important	Important	Neutral	Un important	Very Important	Total
Less than 15000	6	4	-	-	-	10
15000 - 25000	68	44	16	3	-	131
25000 - 35000	115	78	24	9	2	228
Above 35000	52	39	27	10	3	131
Total	241	165	67	22	5	500

Source: Primary data

Chi-square = 16.93

$$\begin{aligned}\text{Degree of freedom} &= (r - 1) (c - 1) \\ &= (4 - 1) (5 - 1) \\ &= 12\end{aligned}$$

The table value of Chi-square for 12 Degree of freedom at 5% level of significance is **21**. Since the calculated value **16.93** is less than the table value, the hypothesis is accepted. So, there is significant relationship between the family income of the respondents and the amount of importance assigned to price while purchasing the fitness equipments.

Association Test

Hypothesis: There is association between the educational qualification of the respondents and the major source of influence to purchase the fitness equipment.

Table 7:
Relationship between Educational
qualification and the Influencing Sources

Factors	School level	Graduate	Post Graduate	Research Degrees	Total Score (%)	Ranks
Print Media	9	11	20	8	117 (8.65%)	IV
Broadcast Media	37	88	48	11	519 (38.36%)	I
Internet	1	85	46	5	356 (26.31%)	II
Friends & Relatives	18	45	26	6	265 (19.59%)	III
Doctors Advice	6	20	2	8	96 (7.10%)	V

Source: Primary data

The results (Table 7) from chi-square test indicates that there is association between the educational qualification and the major source of influence to purchase the fitness equipment as the chi-square value is 66.22 which is less than the table value at level of significance .02. Thus the hypothesis is accepted. So, there is relationship between the educational qualification of the respondents and the major source of influence to purchase the fitness equipments.

It is also inferred from the above table that the major source of influence to purchase the fitness equipment is Broadcast media as it receives rank 1.

Percentage Analysis

All the respondents may not get the same level of satisfaction in doing exercises on the fitness equipments. So, the respondents' opinion towards fitness equipment is shown in Table 8.

Table 8:
Respondents' opinion towards Fitness equipments

Sl.No	Factors	No of Respondents	Percentage
1.	Excellent	84	17
2.	Good	167	33
3.	Satisfactory	178	36
4.	Poor	71	14
	Total	500	100

Source: Primary data

From Table 8, it is inferred that the majority of 36 per cent of the respondents opinion towards the fitness equipments is satisfactory.

Mc Nemer Test

The changes felt by the respondents before and after doing the exercises.

Hypothesis: There is no significant change felt by the respondents before and after doing the exercises.

Table 9:
Changes felt Before and
After doing the Exercises

Before Exercise	After Exercise		Total
	Feeling Good	Not Feeling Good	
Feeling Good	287 (A)	6 (B)	293
Not Feeling Good	200 (C)	7 (D)	207
Total	487	13	500

Source: Primary data

The Mc Nemer test involves the calculation of chi square according to the following formula.

$$\begin{aligned}\text{Chi square } X^2 &= [|C - B| - 1]^2 / C + B \\ &= [|200 - 6| - 1]^2 / 200 + 6 \\ &= \mathbf{180.9}\end{aligned}$$

The calculated value of chi square is **180.9**. The critical value of chi square for alpha = 0.05 and (r - 1) (c - 1) = 1 degree of freedom is **3.84**. As the calculated chi square value exceeds the critical value, the hypothesis is rejected.

Therefore, it is concluded that there is significant change felt by the respondents before and after doing the exercises.

Results & Discussion

Motivating factors towards Fitness Equipments

Analysis through Garrett ranking method shows that the major motivating factor for the respondents to use the fitness equipments is "weight reduction" that receives rank 1, the next major factor is to reduce obesity that receives rank 2, followed by factors like desire to be healthy always, doctors advice, motivation from friends, stress reduction, motivation from family members, to maintain beauty, advertise-

ments and to maintain BMI which receives ranks 3, 4, 5, 6, 7, 8, 9 and 10 respectively.

Women consumer's attitude towards Fitness equipments

Preference for the selection of a fitness exercise equipment is identified by means of ranking method in terms of 5 factors and it is found that, the majority of the respondents preference is for the equipments that require less maintenance, followed by the equipments that operates without power, equipments that are easy to use, equipments that occupy less space, and equipments that are easy to carry.

The women consumer's attitude towards the fitness equipments was found using semantic differential scale and the overall opinion given by the respondents is that fitness equipments are "good, useful, very high priced, neither comfortable nor uncomfortable and somewhat easy to operate".

It has been found from the study that the dominant number of respondents consider the price as a very important factor while purchasing fitness equipments.

It is also identified from the study that the most important influencing factor for the respondents to purchase the fitness equipments is the broadcast media.

It has been found from the study that majority of the respondents' opinion towards the fitness equipments has been satisfactory.

The chi-square analysis reveals the association between the family income of the respondents and the amount of importance assigned to price while purchasing fitness equipments. It concludes that there is close relationship between these two factors since the respective chi-square values are significant at 5 per cent level.

Association test was used to explore the mode of influence to purchase the fitness equipments and it is found that broadcast media is the major source of influence for the respondents to purchase the fitness equipments. It also shows that there is association between the educational qualification and the influencing factors to purchase the fitness equipment since the respective chi-square values are significant at 2 per cent level.

Mc Nemer test was used to test the hypothesis that "There is no significant change felt by the respondents before and after doing the exercises". The test concludes that "There is significant changes felt by the respondents before and after doing the exercises" since the calculated value exceeds the critical value and the hypothesis has been rejected.

Discussion

Fitness is important not only for medical reasons, but also for mental health reasons and for overall quality of life. The most obvious reason for the women to go for fitness center is for weight loss, for health reasons as well as simply to feel and look better. The unhealthy food choices consumed by women like fast foods, junk foods and sweets and foods which lack nutritional value should be avoided in order to reduce weight and maintain health.

Exercising on fitness equipments shall be made entertaining and enjoyable since the users may get very bored in using the fitness equipments for hours without any entertainment.

While most of the people are happy with the fitness advice and instruction provided, a significant minority feel that it does not meet their expectations. So, the fitness centers

should try to give proper guidance especially to the new customers.

Some of the fitness centers are providing weight loss pills to the customers for immediate weight reduction. It is recommended by the researcher that weight loss pills for immediate weight reduction should not be encouraged by the fitness centers. A weight loss pill not only reduces the weight but also affects the health.

Not everyone benefits equally on using the fitness equipments. There is tremendous variation in individual response to training; some people will get a difference within three months after using the fitness equipments, whereas the others will get a difference after three months from using the fitness equipments, whereas some people will never get any change on using the fitness equipments. So, it is always advisable to consult a professional health care advisor before beginning any physical fitness program.

Conclusion

The results of the study reveal that the important motivating factor among the respondents to use the fitness equipments is weight reduction. The dominant number of respondents' preference is for the equipments that require less maintenance and most of the respondents consider the price as a very important attribute while purchasing the fitness equipments. Finally, it is hard to get motivated if we are not used to any physical activity. The first step is to change the way we think about exercise. We should keep reminding ourselves that it will not only make us feel so much better, it will also improve the quality and length of our life and more importantly it is fun!

Scope for Further Research

The present study made an attempt in Madurai city alone, the study can also be done in other cities in India and abroad. This study has given enough scope for further research related to fitness industry and the same has been listed below:

1. A detailed study may be conducted to know the problems faced by the consumers in doing the fitness exercises.
2. A study may be conducted to know the impact of physical exercises on mental well-being.
3. A study may be attempted to know the customers attitude towards fitness centers.
4. A study may be attempted to know the customers attitude towards advertising on fitness equipments.
5. A comparative study can be done to know the benefits of exercise activities without equipment and with fitness equipments.

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About the Author

Dr. K. Navarathinam, is an Associate Professor at R.L. Institute of Management Studies, Madurai

The author can be reached at navarathinamk@yahoo.com