

ADAPTABILITY TO MENSTRUAL CUPS QUESTIONING CUSTOMER INTELLIGENCE: A STUDY ON INDIAN WOMEN'S SATISFACTION TOWARDS MENSTRUAL CUPS AND SANITARY NAPKINS

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Abstract

Menstrual hygiene remains a challenge for women, especially in India, where the transition from cloth to sanitary pads has been significant. The ongoing shift from pads to menstrual cups presents new challenges. Menstrual cups, made from high-grade medical silicone, are biodegradable, reusable, and can last up to 10 years. Their growing acceptance among Indian women has broader social implications. This study aims to compare female satisfaction concerning menstrual cups and sanitary pads. It also examines adaptability issues associated with menstrual cups, posing a challenge for marketers seeking to understand consumer behavior. Data were collected via questionnaires from women in Delhi/NCR who had used menstrual cups at least three times. Referrals from existing users helped recruit participants. To analyze satisfaction levels, descriptive statistics, and paired t-tests were applied using MS Excel and SPSS. The results indicated that women using sanitary pads reported higher satisfaction than menstrual cup users. Key challenges included insertion, usage, and leakage concerns. Perception played a crucial role in adaptability, affecting adoption rates. This study highlights menstrual cup adaptability concerns and provides insights for researchers, consumers, and marketers. Marketers need to address perception barriers by identifying key drivers of menstrual cup usage. Changing consumer perception is essential for broader adoption.

Keywords: Adaptation, Customer Intelligence, Menstrual cup, Menstrual hygiene, Reusable.

INTRODUCTION

A healthy lifestyle and a healthy society are one of the foremost priorities of the people living in India now. Fortunately, most people are innately healthy, but the main task is to be able to take care of the healthiness that has grown by the nature. Indian Women have grown tremendously in the last decade, mainly due to the changes in societal norms. She is more educated, ambitious, and empowered. She is involved in many of the decisions taken by the family. She is earning and her disposable income is also growing rapidly, thanks to higher incomes from their profession. The lifestyles of Indian women have changed rapidly, and their purchasing behavior is largely dependent on digital instruments and gazettes. They are more health conscious and also know the definition of a value proposition.

The Sanitary napkin market in India was valued at US \$ 618.4 million in the year 2021. India is home to over 355 million menstruating women and girls, yet millions still encounter major

obstacles to managing menstrual hygiene with comfort and dignity. Menstruation is the normal release of blood and tissue from the uterine lining through the vagina that happens as part of a woman's monthly menstrual cycle. It occurs between menarche, a girl's first period, and menopause, when the menstrual cycles end. The average menstruation time is normally menstruating women is about days. Each month, the body of a woman prepares for pregnancy. The uterus or womb sheds its lining if no pregnancy occurs. The menstrual blood and partly tissue from inside the uterus passes out of the body through the vagina. It usually starts between the ages 11 and 14 and continues until menopause at about age 51.

Menstrual hygiene has always been challenging for women, especially in countries like India, where women moved from clothes to sanitary pads, and the process of moving from pads to menstrual cups is underway. The evidence on menstrual cups is really limited because of many challenges. On one hand, a marketer wants to encourage the use of menstrual cups in the Indian market; on the other hand, the adaptability of the same is still at the crossroads. Whether menstrual cups are going to be breathable is the question of the hour. This study examines the adaptability of cups among females and the challenges faced by the users.

REVIEW OF LITERATURE

Traditional practices still prevail in developing countries due to a dearth of knowledge, information, and also best hygiene practices. Belief and attitude also play a vital role in the acceptance of the product (Mukherjee A, et al.2020).

In India, women still use cloth pads as a sanitary option. They may contain sustainable sanitary options, but must be hygienically washed and dried in the sunlight. The sun's heat is a normal bactericide, and drying the cloths/cloth pads beneath it disinfects them for future utilization. These cloth pads can be reused, so they are cost-effective, easily obtainable, and eco-friendly. They must also be stored in a clean, dry place for reuse to prevent infection.

The second option available is sanitary pads, which are largely used by Indian girls and women. They are readily available at several stores, pharmacies, and online. They are costly in comparison to cloth pads, non-reusable, and not highly environmentally friendly. It is always questioned concerning the cotton used in their making, which is not 100% natural and may contain pesticides. Affordable sanitary pads made from waste banana tree fiber are now available for rural women. They are environment-friendly and decay within six months after use. Whether it is a sanitary pad or cotton cloth, a culture of covering up the reality of discomfort to women during menstruation always persists (Houppert K, 1999). In the developing world, menstrual management is not only problematic; it also may have a solemn adverse impact on the lives of women. Energy to produce low-cost materials is sorely missing (Bharadwaj S, Patkar A;2004).

Women have practiced using cloths, absorbent pads, or tampons to manage the menstrual flow. When it comes to washing clothes or disposing of the pads hygienically, it is a task for most females. In some cultures, women alternatively use rags, which must be reused, but washing them may be restricted by lack of water or the privacy needed to wash such rags and reuse them,

resulting in compulsory use of damp or even wet contaminated rags (Bharadwaj S, Patkar A;2004), (Ten A.;2007), (Delaney J, Lupton MJ, Toth E. 1988)

It has also been collected that in India, women have started using menstrual cups as a third option to manage their menstrual flow. A menstrual cup is the next option for menstrual flow management and a device that is claimed to be a healthy and environmentally friendly alternative to other options for menstrual sanitary protection. Vaginal devices have an extensive and exciting history. The first device was patented in 1867 in the United States (Hockert SL). The only surprising fact is that the Initial vaginal cups used for menstrual absorption have not ever accomplished extensive use, even though for decades they were available in developed countries.

In many countries, women like menstrual cups because they don't include any chemicals, bleaches, or fibers that could trigger allergic responses or sensitivity in many parts of the world. Menstrual cups are tougher for women to insert than tampons, but these issues can be resolved by teaching them about their bodies and proper insertion methods. The requirement to clean the reusable cups was one of the main drawbacks highlighted by women in the poll; however, this drawback can readily be avoided by using a disposable menstrual cup.

They might be an innovation for women and girls and a replacement for tampons and sanitary pads but folding and placing them into the vagina to collect menstrual fluid, still sounds a difficult proposition to some females. No doubt they can be worn for six to twelve hours, but still, it depends on the menstrual flow. They are safe for the environment and reusable. In areas with poor sanitation, it offers a practical, affordable, and sustainable option.

Many studies revealed that acceptability in low and middle-income countries suggests cups as a potential option for girls as well as women and girls have reported the acceptance of the product (Averbach S, Sahin- Hodoglugil N, Musara P, Chipato T;2009) (L, Mason Laserson K, Oruko K, Nyothach E, Alexander K, Odhiambo F, et al.;2015)

Many women are not aware of the benefits and challenges involved in the usage of cups. In many developing nations, females have started adopting menstrual cups but the uptake is low which requires proper mentoring and positive experiences from peers (Oster E, Thornton R. (2012), (Van Eijk AM, Laserson KF, Nyothach E, Oruko K, Omoto J, Mason L, et al. 2018).

Some products are perceived differently before using them. Menstrual cups can be one of them. The mere insertion of the cup can be fearful for customers. The thinking of pain can be the idea of not using the cups (North B, Oldham M. 2011).

NEED AND JUSTIFICATION OF STUDY

With all the facts about various options available and adaptability to menstrual cups in developing nations like India, there is a need and justification to study the satisfaction of women with menstrual cups in comparison to sanitary pads. Manufacturers of menstrual cups would like to have a lucrative market for menstrual cups, but on the other hand, females need a notion to adapt

to the same and use it with convenience. The menstrual cup, whether disposable or reusable, is attached to the usage of the same, and satisfaction with respect to cups leads to use in the future. The researcher has researched the basis of the mentioned need to study the satisfaction of women with menstrual cups and sanitary napkins.

OBJECTIVES OF THE STUDY

The primary objective of the study is to understand the satisfaction level of females with menstrual cups in comparison to sanitary napkins. The other objective of the study is to understand the adaptability issues associated to menstrual cups.

RESEARCH METHODOLOGY

To achieve the objective of the study, both primary and secondary data were used. The primary data was collected through a questionnaire. The questionnaire aimed to gather information on the satisfaction levels of females toward sanitary napkins and menstrual cups. The secondary data was collected through websites, journals, books, and other sources. A questionnaire was prepared to gauge satisfaction with menstrual cups and sanitary napkins among females.

An inclusion-exclusion criterion was important to set as finding respondents who have used menstrual cups was a little arduous task.

Inclusion criteria • Menstruating women in the age group of 21 to 50 years • Having regular menstrual cycles • have used both sanitary napkins as well as cups. It was earlier decided to include females who used the cups in three consecutive menstrual cycles, but this criterion was not considered, and women who have used cups at least three times during their menstrual cycle, irrespective of the consecutive condition, were decided as the final criteria.

Exclusion criteria • The researcher assured that the respondent who is filling out the questionnaire has used menstrual cups. This was to ensure that the data is captured from the right respondent. So, women who didn't use cups were excluded.

Finding the respondents who have used menstrual cups was not an easy task, so judgment sampling was used along with convenience to understand that the sample is a true representative of the population

The questionnaire was administered for pilot testing to check its reliability. The Cronbach alpha for sanitary napkins came out to be .769, whereas for menstrual cups it was .902. This gave a researcher an indication that the questionnaire is reliable to be used for further data collection. Data collected and were analyzed using descriptive statistics and paired t-tests to investigate the satisfaction level of respondents with sanitary and menstrual cups. As far as statistical tool is concerned, MS Excel and SPSS were applied to analyze data.

HYPOTHESIS

To understand the objectives, the following hypothesis was formulated:

H₀: There is no significant difference in the satisfaction levels of females toward sanitary napkins and menstrual cups.

H_a: There is a significant difference in the satisfaction level of females towards sanitary napkins and menstrual cups.

RESULTS & DISCUSSIONS

Table 1: Paired Samples Statistics

| | Mean | N | Std. Deviation | Std. Error Mean |
|--------------------------------|-------|----|----------------|-----------------|
| Pair 1 Sanitary Napkins | 37.86 | 72 | 4.610 | .543 |
| Menstrual cups | 30.43 | 72 | 5.881 | .693 |

Source: Survey analysis

Table 2: Paired Samples Correlations

| | | | Significance | |
|---|----|-------------|--------------|-------------|
| | N | Correlation | One-sided p | Two-sided p |
| Pair 1 Sanitary napkins & menstrual cups | 72 | .001 | .496 | .992 |

Source: Survey analysis

Table: 3 Paired Sample Test

Paired Differences

| | | | | 95%confidence Interval of the Difference | | | | Significance | |
|---|-------|---------------|----------------|--|-------|-------|----|--------------|-------------|
| | Mean | Std Deviation | Std Error mean | lower | upper | t | df | One-sided p | Two-sided p |
| Pair 1 Sanitary napkin & menstrual cups | 7.431 | 7.468 | .880 | 5.676 | 9.185 | 8.443 | 71 | <.001 | <.001 |

Source: survey analysis

Table 4: Paired Samples Effect Sizes

| | | | | 95% Confidence Interval | |
|---|--------------------|-------|------|-------------------------|-------|
| | | | | lower | upper |
| Pair 1 Sanitary napkin & Menstrual cups | Cohen's d | 7.468 | .995 | .710 | 1.276 |
| | Hedges' correction | 7.548 | .984 | .702 | 1.262 |

Source: survey analysis

This output provides useful descriptive statistics for the two groups that we have compared, including the mean and standard deviation well as actual results from the paired t-test. Looking at the Mean column, we can see that females who use sanitary napkins have high satisfaction as compared to females who use menstrual cups.

we can see that there is a mean difference between the two trials of 7.431 (Mean) with a standard deviation of 7.468 (Std. Dev.), a standard error of the mean of 0.880 (Std. Err.), and 95% confidence intervals of 5.676 to 9.185(95% Conf. interval). An obtained t -value (t) of 8.443 the degrees of freedom (degrees of freedom), which are 71, and the statistical significance (2-tailed p -value) of the paired t-test ($\Pr(|T| > |t|)$ under H_a : $\text{mean}(\text{diff}) \neq 0$), which is less than 0.05. As the p -value is less than 0.05 (i.e., $p < .05$), it can be concluded that there is a statistically significant difference between our two variable scores (sanitary napkins and menstrual cups). In other words, the difference in the satisfaction level is not equal to zero.

Paired t-test was run on a sample of 73 females to determine whether there was a statistically significant mean difference between the satisfaction level when they used sanitary napkins compared to menstrual cups, a statistically significant increase of 7.431 (95% CI, 5.676 to 9.185), $t(71) = 8.443$, ($p < 0.05$).

Hence there is a statistically significant difference in the satisfaction level of females using sanitary napkins and females using menstrual cups.

The survey administered brought some facts about sanitary napkins and menstrual cups concerning many attributes. If a handler needs to track the quantity of blood released, a menstrual cup allows one to do so precisely. Some may need it for medical reasons. Insertion is an arduous task as it can be messy. While removing the cup, the chance of blood spilling is there if the cup is full and one has to rush to the toilet urgently. Respondents also mentioned their concern over leakage of cups if not emptied on time or not inserted properly. On the other hand, some respondents also replied that menstrual cups are hygienic but somehow lack confidence in carrying them when they are out of their homes. The points go well in favor of cups when it comes to odour which is the biggest drawback in pads. Though researcher also observed that respondents

felt that sanitary napkins can cause infection. But one can also analyze that the insertion of cups also requires touch at some parts which may cause infection.

In the case of menstrual cups, perception is playing a major role in adaptability. Females carry the perception that a cup might get stuck in the vagina which may cause danger to some parts of the body reducing fertility as described by other studies (Averbach S, Sahin-Hodoglugil N, Musara P, Chipato T, van der Straten A. 2009). Females also feel that their everyday life is affected when they use cups as they get more conscious of matters like leakage, emptying the cup, insertion, etc.

CONCLUSION

Adaptability is a big question when related to customer intelligence. Today, customers are not anxious about change, they are concerned about no change. (Gulati, U., 2018) In the case of menstrual cups, marketers are looking forward to the same. Customer intelligence, we all know, helps in getting insights into which strategy makes a bigger impact. In the Indian market, one can see marketers advertising their brands of sanitary napkins through Television Commercials. Is the scenario for promotion is same for menstrual cups? Here comes the concept of customer intelligence, where the marketer is aware that cups still require a big yes from Indian females. Maybe many attributes of the menstrual cup market are attached to adaptability. Marketers have to study drivers and retainers of the usage of cups.

Adaptability is not restricted to cups only but also to health and hygiene. Do these cups have become more effective during this time is one question that still needs consideration by marketers. Acceptance cannot be manipulated in a country like India, where still the majority of women have not heard the same or heard but not seen, and even used.

The global menstrual cup market was valued at USD 861.14 million in 2021 and is projected to reach USD 1,372.53 million by 2029, with a CAGR of 6.0% during the forecast period from 2022 to 2029. (Mukherjee A, Lama M, Khakurel U, Jha AN, Ajoy F, Acharya S, Tymes-Wilbekin K, Sommer M, Jolly PE, Lhaki P, Shrestha S. 2020). One can cultivate the domestic market and cross the boundaries, but what if the domestic market is still unserved?

So, with many “if” related to the adaptability of menstrual cups, the satisfaction of females who have used them is under question, and consideration of the fact is required for those females who have never used them because of restraints more related to perception. Marketers must carry the positioning of the product first rather than their brand. The advantages and disadvantages of products are still not clear to many women.

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