

# The Experience of Giving Birth; Insights of Evaluation of Childbirth Satisfaction

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## ABSTRACT

The importance of service as an added value different between organizations and improving customer conservation has motivated organizations to adopt models and instruments to improve service and enhance customer satisfaction. Based on the premise that “managing means assessing”, organizations have been investing in various tools aimed at assessing service, detecting service gaps, and identifying the central elements that affect customer satisfaction.

The study characterized and compared two central tools for assessing satisfaction: the SERVICEQUAL model, which examines the gaps in service in five different dimensions, and the PS3 model, which examines the effect of three elements – Personal care, Physical surrounding, and Process technical – on women’s satisfaction with childbirth care.

The findings show that in both models, the dimension of personal touch, particularly empathy, accessibility, and reliability of the medical team, was the most meaningful parameter in determining the level of satisfaction and the service experience of the mother. Additionally, according to the SQ model, the tangibles of the service also carry an important role in the patient’s satisfaction during childbirth. In other words, better service in terms of the tangible elements of the process lead to higher satisfaction among the patients.

**Keywords:** Childcare, SERVICEQUAL, Personal care, Physical surrounding, Process Technical, Service Satisfaction

## REVIEW OF LITERATURE

### The Role of Service Satisfaction

Service satisfaction is one of the main factors influence customer loyalty mainly within service organization.<sup>1,2</sup> As compared to tangible products, service has unique characteristics that require specific attention by the organization. Some of its unique characteristics are the following.<sup>3</sup> First, since service is not tangible, the possibility of an unsuccessful purchase creates higher levels

of anxiety for the consumer. Second, the perception of the service is affected by the perception of the service provider. Third, there could be considerable variance between services, even when they are provided by the same provider. Finally, a service cannot be stored, thus the supply and demand must be synchronized. These characteristics require more diverse and creative marketing for services compared to tangible products, such as providing a tangible environment to demonstrate the service, training service

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providers in treating customers with empathy and courtesy, acquiring skills in providing uniform service, or offering special sales to increase low demand (such as special sales on swimming pools in winter or online shopping during a pandemic lockdown).<sup>4,5</sup>

Today, as there is lower differentiation between physical products (for instance, it is hard to identify differences between two different computers or two different colleges), many organizations are creating differentiation by emphasizing the service and focusing on its marketing. "Service is the new marketing" is not just a slogan but reality.<sup>3-5</sup>

In tangible products customer service is based on the product's quality where in non-tangible services the customer satisfaction is based on the service fulfilment during the service. The customer's satisfaction often works as a key reason for loyalty and thus for customer conservation. When the service is perceived as being of high quality and the customers are satisfied with it, they will be more likely to remain loyal to the brand, forgive its mistakes, recommend it to friends, and increase their purchase from the company.<sup>3,4,5</sup> Increasing customers' share in the market as well as customer's loyalty, will be possible if the service is excellent and results in conserving the current pool of customers.<sup>6-8</sup>

Thus, organizations of all sizes and in various industries invest significant resources in improving service and keeping satisfied and loyal customers. In addition, organizations also assess their service and their customers' satisfaction before, during, and after the service is provided. These efforts, which are geared towards improving service, include training employees, investing in measuring customer satisfaction, and comparing it to expectations, and conducting market surveys before, during, and after the purchase. These are only some of the tools used to improve service and increase satisfaction among existing customers.<sup>5,7</sup>

*Service's Involvements:* Involvement is defined as the level of effort invested by the consumer while purchasing, and it derives

from the perceived risk of unsuccessful purchase. An additional definition for involvement includes the level of engagement of the customer with the service.<sup>8-10</sup> When the involvement is higher, so is the level of anxiety over the possibility of unsuccessful purchase, because the customer has more to lose if the purchase turns out to be a failure. In addition, high involvement increases the customer's loyalty to the organization or service.<sup>11</sup>

Studies have shown that when the level of involvement is high, the customer is more interested in intensifying the communication and relationship with the service provider than in cases of low involvement [<sup>8,11,12</sup>]. In high-involvement services, such as financial, medical, or computer services, customers have been found to seek more engagement, create longer interactions with the service provider, and be generally more involved. This entails that the satisfaction of customers with high involvement services often depends on their relationship with the service provider. They expect the service provider to consult with them and adjust the service to their specific needs, and even tailor unique services, creating multiple opportunities to engage in the service.<sup>11</sup>

Empathy of the service provider, as it reflects specific, experience-oriented attitude towards the customer, probably creates a subjective sense of involvement. Empathy is defined as a person's ability to enter another person's world and experience his subjective experience while also preserving the stance of an objective observer. Empathy involves recognizing a person's emotion rather than offering practical assistance. It is interesting to examine the component of empathy in the experience of childbirth care: will recognizing the mother's emotions and understanding her experience suffice to create a sense of satisfaction or is practical assistance a crucial component of the experience.<sup>13-15</sup>

### **Models Evaluate Service Satisfaction**

Understanding the importance of customer satisfaction, organizations channel considerable

resources towards measuring the satisfaction of their customers to improve their services accordingly, under the assumption that management requires measurement. Numerous models have been developed for measuring the service and its various parameters. One of these models is PS3, which is based on the understanding that since service is not physical and based on customer's experience, it is harder to assess.<sup>16-18</sup>

According to this model, there are three dimension that affect the customer's satisfaction with services: Personal care, Process Technical and and Physical surroundings. Personal care focuses on the service provider and includes reliability, professionalism, the relationship with the customer, courtesy, empathy, fairness, involving the customer in decisions, and giving the customer a sense of being uniquely treated as an individual with special needs that must be attended to.<sup>18</sup>

The parameter of technical process focuses on the service itself. It refers to the availability of the service, the wait time required before receiving the service, the clarity and efficiency of the process, and what technical elements, equipment, and special resources are needed for providing the service (such as access to a user-friendly website or medical equipment)<sup>[17, 19]</sup>. This parameter is especially important in ongoing services, such as health services, which require a long-term relationship. It is also vital where customer satisfaction derives, among other things, from the accessibility of the service provider and the relevant medical equipment.

The parameter of physical surroundings refers to the physical space where the service is given. It assesses whether it is clean and aesthetic, has a pleasant atmosphere, allows privacy, marked by clear and effective signage, includes special features such as breastfeeding corners, and more.<sup>20</sup> The surroundings are not necessarily a physical space but might be an online store; in that case, this parameter is measured by the coherence and clarity of the website, the languages it uses, and more.

Examples of such cases are tourism services and short-term services, where the atmosphere is important for demonstrating the service as it is perceived by the customer, and online consumer services, where the website should be user-friendly. In these cases, the service environment and atmosphere has a crucial effect on customer satisfaction.<sup>19, 21</sup>

Studies that examined satisfaction with birthing services have found that the personal care and the technical process parameters are the most significant factors. It has been shown that the mother's satisfaction with the delivery services increases when the medical staff is perceived as highly professional, creates an empathic connection with the mother, is readily accessible, involves the mother, and shows empathy toward her and her companions<sup>[17, 19, 21]</sup>. The effect of these elements on the satisfaction of the mother is unrelated to her demographic characteristics, such as marital status, age, or religious affiliation.

Another model estimate customer satisfaction is SERVICEQUAL (SQ), which measures the gaps between customers' expectations prior to obtaining the service and their perception of the service after receiving it. The model measures the gaps over five dimensions, initialed as RATER.<sup>1, 22, 23</sup> The first parameter is Reliability, which refers to the organization's ability to deliver the service dependably and accurately. The second parameter is Assurance which is the knowledge and courtesy demonstrated by the employees, and their ability to inspire trust and confidence. The tangibles parameter refers to the appearance of the physical facility, the equipment, personnel, and written materials. The parameter of Empathy relates to caring, easy access, good communication, customer understanding, and individualized attention to customers. The final parameter, Responsiveness, is the willingness to provide the service promptly.

The model is based on the rationale that a substantial gap between the expectation of a customer and the actual service performance translates into a low level of satisfaction.

Thus, an organization must identify the expectations against the actual performance and reduce any existing gaps. When such gaps are reduced and the expectations resemble the actual performance, then the customer will not be disappointed but rather satisfied with the service and therefore will be loyal and return for repeating purchase <sup>[12,14]</sup>.

The five parameters of SQ were selected based on research showing that the customer expects service that is Reliable, Assurance, Tangible, Empathy, and Responsiveness. Studies carried out in various industries, such as health, finance, and tourism <sup>[24, 25]</sup>, did not single out one parameter as showing consistently significant gaps and failing to meet the customers' expectations. Most studies have shown that all five RATER dimensions significantly affect customer satisfaction, so reducing gaps in all five dimensions is important. However, studies regarding health services have shown that the dimension of tangibles is the most meaningful one, probably since the customer expects to be served in an aesthetic, well-kept clinic <sup>[24,25,26]</sup>.

### **Insights from Studies Analyze Mother's Satisfaction from Childbirth:**

In 2020, 117,307 babies were born in Israel: 91,101 (51.4%) boys and 86,206 (48.6%) girls in Israel. The average age of women at birth of first child in Israel is 27.4(29.4 in EU). (<https://www.cbs.gov.il/en/mediarelease/Pages/2022/Births-and-Fertility-in-Israel-2020.aspx>). Due to the excellent quality of the public health system, and because of fear of home births, 99% of deliveries in Israel take place in public hospitals, compared to a rate of 33% home deliveries in Holland and Belgium <sup>[14]</sup>. Women can choose to deliver a baby at any hospital, regardless of where they live, and because hospitals receive high grants (over \$3,000) from the Ministry of Health for every delivery, the competition between them is fierce. As a result, hospitals put much effort into improving women's childbirth experience, including offering stylish delivery rooms, choice of the type of childbirth (water birth, natural birth, etc.), hotel-style post-partum conditions, and other benefits <sup>[14,21]</sup>.

Two studies we conducted in 2020-2021 <sup>[26,27]</sup> were based on the SQ and PS3 models. They examined the parameters that affect the experience of childbirth. The PS3 model highlighted the role of the human connection with the service provider in the patient's satisfaction. According to the study based on this model, the mother was affected by components such as empathy, kindness, and consultation with the medical team during the labor process. When the team is kind and attentive to the mother's needs, involving her in the process and giving her the feeling that she is not alone, then she is more satisfied with the procedure <sup>[27-28]</sup>. According to these studies, the human factor was significant both in the secular population and the religious orthodox one, which is characterized by being more modest, less exposed to internet content, and in general runs a closed and traditional lifestyle. Women who had given birth reported that when they were treated kindly and involved in the process, they felt better and valued the service more <sup>[26,28]</sup>.

Another important factor was the technical process <sup>[28]</sup>, including elements such as presence of the medical team and availability of medical machinery and alternative care equipment. These also had a direct effect on creating a sense of satisfaction, although to a lesser degree than the human factor.

The physical surroundings were found to have a minor effect on the woman's general satisfaction <sup>[29,30]</sup>. The study participants reported that their level of satisfaction had not increased or decreased because of the delivery room's aesthetics, privacy, or atmosphere.

When we employed the SERVICEQUAL model to examine the dimensions that affect satisfaction with childbirth, we found that prior to delivery, the only meaningful associations were between empathy and responsiveness and empathy and service tangibles. This means that the dimension of empathy had the strongest impact on mothers' satisfaction. In contrast, after childbirth, the correlation was high between all five dimensions, so that if the mother felt that the medical staff was

reliable, she also perceived it as responsive and empathic, and was pleased with the tangible aspects of the treatment<sup>[11,33,34]</sup>.

Furthermore, findings from the study based on the SQ model revealed that the biggest gap between prepartum expectations and postpartum perception of service was in the dimension of tangibles. According to this finding, when women give birth, they expect the tangible aspects of the service to be better than they are; for example, they expect the delivery room to be comfortable, contain appropriate medical equipment, and be hygienic. However, after the process they perceive these aspects as unsatisfactory, leading to disappointment because their expectations have not been met. In the other dimensions, the gaps between expectations and perceived performance were insignificant<sup>[26,31]</sup>. In other words, the mothers' expectations of the staff in terms of reliability, accessibility, assurance, and empathy have been satisfied. Among other things, the dimension of tangibles includes advanced medical and alternative care equipment in the delivery room, in addition to hygiene of the midwife and comfort of the room. The study has shown that regardless of the mother's previous experience with childbirth, she expects the tangibles of the facilities, including professional equipment and emergency equipment, to meet a certain standard, which has a marked effect on her overall satisfaction.<sup>[28,34]</sup>

## CONCLUSIONS

The motivation behind the studies we conducted, which measured women's satisfaction with childbirth services, was to assess the service to gain insights into the customer's experience and ways to assure her long-term loyalty. The studies drew on two models, instruments of service evaluation. The first model is the PS3 model, which measures customer's satisfaction in three dimensions: Who provide the service, how does it provide and where. The second model is SQ, which focuses on the gaps between customers' expectations before obtaining the service

and their perception of the performance. These gaps are tested over five dimensions: reliability, accessibility, and empathy of the service provider, alongside the service's assurance and tangibles<sup>[19,21]</sup>.

Even though each model measures the service in a different context—PS3 highlights the three dimensions of service whereas SQ focuses on the gaps between expectations and performance—both models underscore the service as a differentiating factor that may account for customer constant buying and emphasize the significance of measuring service and customer satisfaction to evaluate the service level and improve it.

Both instruments according to our findings as well as previous research<sup>[23, 26, 31]</sup> — indicate the important role of the service provider: our findings have shown that the experience of childbirth depends on the interpersonal communication between the woman in labor and the obstetric team, and that this interaction prioritizes over the birthing process and the physical environment in determining the level of satisfaction. In both models, regardless of marital status, previous childbirths, religious faith, education or income, the most significant components is determining the mother's satisfaction were the communication with the staff during the process and whether she was treated as a partner and her needs were respected.

In this aspect of human resource, both models lead to a similar conclusion, by highlighting the role of the human factor. Thus, if hospitals are interested in raising patients' satisfaction to create loyalty so that women return to the same facility for their next deliveries, they must teach these skills to the medical teams, including training and seminars, emphasizing the role of establishing a positive relationship with the mothers. The explanation for the effect of the human factor on the mother's satisfaction may draw from the fact that childbirth is a medical service with high involvement<sup>[32,33]</sup>. A pregnant woman tends to be anxious and unsure of the outcome, her condition during the

pregnancy, and how it will end. Therefore, the attitude of the personnel and the way she is treated, involved in decision making, and explained the procedures (regardless of the physical pain)—all these elements affect her perception of staff reliability and service quality.

Numerous other studies,<sup>28,34</sup> which focused on medical or financial services with high involvement, also pointed to the important role of the relationship between the customer and service personnel, since the service extends over time, requiring a fruitful partnership with the customer. However, our study also underscores the role of service tangibles, in addition to the attitude of the service provider. Because of the high involvement of a pregnant woman, she expects to be informed about the process at every step. It is possible that the high level of stress associated with pregnant women (regardless of the number of previous childbirths) produces high expectation for a comfortable experience with high-end equipment and emergency devices. When these elements are present, the woman feels more reassured in the face of the challenging experience of labor.

## LIMITATIONS

### There are several limitations to the research

First, we compared results of two models, each measuring mothers' satisfaction using different measures and distinct parameters. Second, the study participants had delivered their babies up to one year before the study. This timeframe may have affected their perception of the experience. Finally, the study was conducted during the Covid pandemic and lockdowns. This additional stressor may have affected the mothers' expectations and overall experience during childbirth.

## DECLARATIONS

### Ethics approval and consent to participate:

The ethical approval was granted by the Internal Ethical Review Board of Hadassah Academic College in March 2021.

## Consent to publish

The manuscript does not include any individual person's data, hence consent to publish is not applicable.

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