

Zone of Tolerance: A Perspective on Post-Purchase Dissonance

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Abstract

In the wake of digitalization in every aspect of India as a nation, the role of e-tailing and online buying behaviour needs no exaggeration. The study takes forwards the idea of consumer behaviour in e-tailing and studies the post-purchase dissonance of consumers when they shop online. Post-purchase dissonance has a major scope for marketers to cater to their customers well and maintain and retain them. The study aims to establish a zone of tolerance for the organizational factors causing post-purchase dissonance, and to identify the zone of tolerance as a way of reducing post purchase dissonance. Three organizational factors taken are courier delivery service, product details and description and product display and visuals. The study establishes the zone of tolerance for these factors through zone height and zone width and identifies that if any of these factors causes post-purchase dissonance, it can be reduced or overcome through the zone of tolerance offering the range of acceptable variations. The study also observes that for the courier delivery service and product display and visuals the customers receives service even less than the minimum acceptable. For product details and description customers have received the service more than their minimum acceptable levels.

Keywords

E-tailing, Post-purchase Dissonance, Zone of Tolerance, Zone Height, Zone Width.

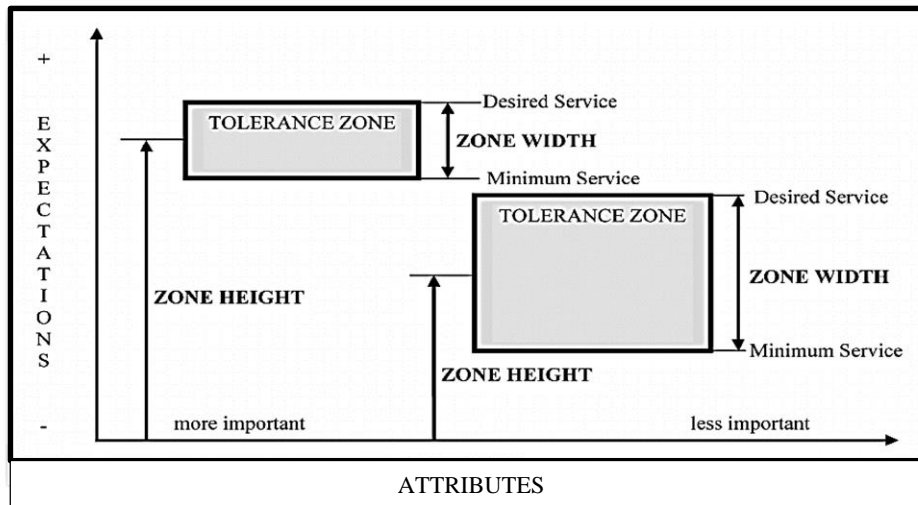
Introduction

The internet has brought about dramatic and dynamic changes in every dimension of our lives and the world around us. and the major role it played in the digital era of millennials is the birth and growth of online sale and

purchase of goods and services or to put it more technically E-tailing. A report by Bain & Co. Inc. and Google India states that, the retail environment and everyday shopping practices of the Indian consumers will be changing tremendously by generating more than US \$ 50 billion in total online sales by 2020. There has been a recent wave of digitalization within the country and the serving Government of India has taken certain initiatives like that of Digital India Programme and Cashless Transactions. With a number of schemes and policies under these initiatives, e-commerce is expanding with speed. The digital population pool is growing at a much faster rate than ever before.

Besides a number of advantages that online shopping has for consumers such as convenience, time saving, home delivery, credit through EMIs, it has certain lacunas as well such as inability to see, feel or touch the product, negotiate one-on-one with the retailer and non-fulfillment of urgent needs. One of the major characteristics of E-tailing is the time lag between the order placed and the service performance. This time lag creates anxiety and excitement among the consumers about the order to be received leading to a higher level of expectations. These expectations when unmatched with the actual product leads to discomfort and dissonance within the consumer. As per Leon Festinger (1957), who propounded the theory of cognitive dissonance, the inconsistency between an individual's attitude and actual behavior creates an uncomfortable psychological state i.e. dissonance. He quotes, "the existence of being psychologically uncomfortable will motivate the person to try to reduce the dissonance and achieve consonance". For reducing dissonance he further, introduced three ways consumers may adopt, change in beliefs; change in action; and change in perceptions about the action.

The zone of tolerance (ZOT) as per Zeithaml et al., (1993) is the range of customer perceptions of a service between desired and acceptable standards. It thus, provides a range of service performance which the customer considers satisfactory and within which he/she is willing to accept variations. Desired service is the level of service customer hope to receive i.e. a mixture of what customer believes the level of performance can be and should be. Adequate service is defined as the lower level of performance that the consumers will accept. The area between desired service and adequate service is known as the zone of tolerance and represents the range of service the customers will tolerate.



Source: Adopted from Zeithaml and Bitner (2003)

Figure 1: Zone of Tolerance

The zone height or Alt Z is the average of the desired service (DS) and the minimum service (MS) of each attribute or factor. The zone width or Larg Z of an attribute or factor is the difference between the desired service level (DS) and the minimum service (MS).

The paper seeks to work on the theory of cognitive dissonance (post-purchase dissonance) together with the zone of tolerance. In a state of post-purchase dissonance a consumer will be self-motivated to achieve consonance. And a consumer's zone of tolerance for a particular factor causing dissonance may act as a way for the consumer to reduce that dissonance. The factors causing post-purchase dissonance have been categorized into individual factors, socio-environmental factors and organizational factors. Three organizational factors- courier/delivery service; product details/description; and product display has been considered for the purpose of the study.

Literature Review

The greatest volume of research is available in marketing discipline to understand the product and service quality expectations. One of such theory is based on the zone of tolerance model introduced by Zeithaml, Berry and Parsuraman (1993). Zeithaml et al., (1993) defined the zone of tolerance (ZOT) as "the difference between desired service and the level of service considered adequate". Desired service is "the level of service the customer

hopes to receive. A blend of what the customer believes can be and should be”. Adequate service is “the level of service the customer will accept”. The difference between the two standards of expectations i.e. minimum and desired service is the range of service performance which the customer considers satisfactory and within which he/she is willing to accept variations. The customer enters the service encounter with different levels of expectations. Performance levels above the desired service leads to customer delight and beyond the minimum service leads to dissatisfaction. The ZOT model proposes that the customer satisfaction results only when the customer perception about service performance falls in the zone. Parsuraman et al., (1994) further developed the ZOT model by testing three alternative questionnaire by focusing on the five SERVQUAL dimensions of reliability, responsiveness, assurance, empathy and tangibles by Parsuraman et al., (1988). A study by Domingos and Kleber (2009) analyzed the relationship between the importance of attributes of service quality and the tolerance zone between the desired and the minimum acceptable levels of customer expectations. However, the study did not follow the SERVQUAL model for the survey and used a different set of service quality attributes considered appropriate for their study of fast food restaurant. There were 45 attributes such as hygiene, preparation and handling of food.

Veerabhadrapa et al., (2013) affirmed the relationship between the service quality attributes and zone of tolerance. They also established the relationship between the importances of service quality attributes, height and width of the tolerance zone. Johnston (1995) examined the relationship between involvement and ZOT. He stated that “the width of ZOT is inversely proportional to the degree of involvement”. Walker and Baker (2000) proposed that the ZOT width varies from essential service quality components to the less essential ones. Whereas the ZOT width will be influenced by the degree of customer experience with the service and the number of competitive alternatives the customer perceived. Gwyne et al., (2000) further strengthened the results of Walker and Baker (2000) by investigating the width of ZOT with different service quality dimensions. As per Zeithaml et al., (1996) while the ZOT model is inappropriate for certain circumstances such as to explain the variance in some independent construct, it is appropriate when the purpose is to diagnose accurately service shortfalls. Leon Festinger (1957) introduced the concept of cognitive dissonance in his book “A Theory of Cognitive Dissonance”. He described cognitive dissonance as the inconsistencies in the individual’s attitude and actual

behavior leading to an uncomfortable psychological state which acts as a motivating factor for the individual to reduce that dissonance just as hunger leads to activities for reducing hunger. He also quoted that, "I am proposing that dissonance, that is, the existence of non-fitting relations among cognitions, is a motivating factor in its own right". According to him an individual can adopt any of the three ways for reducing dissonance: change his actions; change his belief or knowledge; and change his belief about actions. Likewise Blythe (2000); O'Keefe (2002); and Littlejohn (2005) also suggested the ways that an individual can use to reduce dissonance such as ignore the dissonant information; distort the dissonant information; adding new elements to one side of the tension or the other; seeking consonant information.

Theory of cognitive dissonance has been applied in various fields of researches, pre-dominantly in consumer behaviour research. The view of cognitive dissonance was widely applied over the entire purchase decision process by Oliver (1997) from pre-purchase phase labeling it as apprehension, which increases over the decision process and is maximum at the post-purchase phase which he labeled as gamma stage. Sweeney et al. (2000) criticized the explanation of dissonance given by Festinger (1957) as it did not clearly identify that whether the dissonance is cognitive or emotional. He argued that apart from cognitive elements cognitive dissonance also includes emotional elements which are an individual's psychological discomfort after the purchase decision. While developing a scale for measuring both emotional and cognitive elements of dissonance, Sweeney et al. (2000) defines the post-purchase dissonance as the one explained by Oliver (1997) which follows the purchase decision but precedes the use or experience with the result of the purchase decision. They developed a scale for measuring post-purchase dissonance. The scale has 22 items divided among three cognitive dissonance dimensions: emotional; wisdom of purchase; and concern over deal.

Bolia et al., (2016) reviewed the causes of cognitive dissonance based on the past studies and classified the factors causing cognitive dissonance into Individual factors, Socio-environmental factors, and Organizational factors. They found individual factors like anxiety (Hawkins, 1972); worry (Hawkins, 1972; Mittelstaedt, 1969; Oshikawa, 1972); ethics (Fraedrich & Ferrel, 1992); moral values (Lii, 2002); self-standard/self-esteem (Stone, 2003); overreaction (Olsen, 2008) and internal belief (Chou, 2012). People surrounding them, expected behavior from the society, religious values and

cultures (Bose & Sarker, 2012; Hoshino-Browne et al., 2005; Veer & Shankar, 2011); and knowledge acquired in past (Bose & Sarker, 2012) are some of the socio-environmental factors. Organizational factors include product characteristics (O'Neil & Palmer, 2004; Bawa & Kansal, 2008); product knowledge and level of involvement in understanding the product (Mishra et al., 2008); and peer group influence (Bose & Sarker, 2012). In studying cognitive dissonance in services, uncertainty (Koller & Sulzberger, 2007); service characteristics and service types (Bawa & Kansal, 2008) plays a major role.

Objectives of the Study

The objectives of the study are mentioned below:

1. To establish the zone of tolerance for each organizational factor causing post-purchase dissonance in online shopping.
2. To identify the zone of tolerance as a way of reducing post-purchase dissonance.

Methodology

The details of the research methodology, for the study to be conducted have been summarized as follows:

Research Design: The study describes the zone of tolerance of each organizational factor considered for the study which causes post-purchase dissonance with the help of desired and minimum acceptable service of these factors. The mean of desired and minimum service is used to determine the tolerance zone.

Sample and Data Collection: On the basis of the available literature and previously conducted surveys by various researchers a questionnaire has been developed for the purpose of the study. The present study adopts the scale developed by Sweeney et al., (2000) for the measurement of post-purchase dissonance. It is a 22 item scale divided into three dimensions i.e. emotional; wisdom of purchase; and concern over deal. The review of literature and through the understanding of the concept of post-purchase dissonance and ZOT three organizational factors causing post-purchase dissonance has been used for the purpose of the study namely, courier/delivery service; product details/description; and product display.

The questionnaire is divided into three sections: the first is the Demographic profile of the customers, the second section deals with online shopping and the third section deals with post-purchase dissonance and the zone of

tolerance. For the last section a five point Likert-scale has been used for every statement of every question ranging from strongly disagree (1) to strongly agree (5). Pretesting of the questionnaire was conducted on a sample of 30 respondents for further purification before the final survey. For the purpose of the study the National Capital Region of Delhi has been taken. The non-probability sampling strategy called convenient sampling was adopted to collect the data. A sample of 100 respondents was taken for the purpose of the study. As per Bryman and Bell (2003), by virtue of its accessibility convenience sampling is available to the researcher.

Data Analysis and Findings

Out of the sample of 100 respondents 82 responses were considerable. However, for the purpose of the study 45 respondents have post-purchase dissonance. The demographic profile of the respondents plays an imperative role in understanding the consumer through their demography, especially in consumer behaviour. 31.11% of the respondents are female and 68.89% of the respondents are male. 57.78% of the respondents are below 35 years of age, 28.89% of the respondents fall in the age group of 35-55 and 13.33% of the respondents are 56 years of age and above. 80% of the respondents are from urban and 20% of the respondents are from the rural nativity. 86.67% of the respondents have education up to the level of university, 11.11% have secondary education and 2.22% have primary education. 22.22% of the respondents are self-employed, 60% are employed, 8.89% are professionals and 8.89% are retired. 42.22% of the respondents have earn an annual income of 1 lakh to 5 lakhs and 57.78% earn an annual income of 5 lakhs and above.

S. No	Characteristics		Percentage
1.	Gender	Male	68.88
		Female	31.11
2.	Age	below 35	57.78
		35-55	28.89
		56 and above	13.33
3.	Nativity	Urban	80
		Rural	20
4.	Education	Primary	2.22
		Secondary	11.11
		University	86.67

5.	Occupation	self employed	22.22
		employed	60
		professional	8.89
		retired	8.89
6.	Annual income	1 lakh to 5 lakhs	42.22
		5 lakhs and above	57.78

Table 1: Demographic Profile of Respondents

The zone of tolerance for each factor causing post-purchase dissonance, encompassing the zone height (Alt Z) and zone width (Larg Z) has been shown in table no. 2. The tolerance zone height (Alt Z) has been calculated as an average of the sum of desired service (DS) and minimum service (MS) and zone width (Larg Z) has been calculated as the difference between the DS and MS. The existence of a zone of tolerance among the customers for the factors which causes them post-purchase dissonance is in itself explanatory that for these organizational factors customers reduce or overcome their post-purchase dissonance through the zone of tolerance by accepting the little variations in the service levels of those factors.

The table also shows the mean of the minimum service and the desired service levels of each factor. The minimum service varies from 3.91 to 4.02 and the desired service varies from 4.4 to 4.58. Table 2 also reveals that the customers are receiving the service above the minimum level of service only in respect to the third factor which is product display and visual because the mean perception for this factor falls within the desired and minimum service levels. For the other two factors i.e. the courier delivery service and the product details and description the customers are not receiving service of even the minimum desired level as the mean perception is lower than the minimum level.

Item	Description	Mean minimum service (ms)	Mean desired service (ds)	Mean perception	Alt z	Larg z
F1	Courier Delivery Service	3.96	4.4	3.93	4.18	0.44
F2	Product Details and Description	4.02	4.53	3.88	4.28	0.51

F3	Product Display and Visuals	3.91	4.58	4.04	4.24	0.66
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Table 2: Mean of Minimum and Desired Service and Height (Alt Z) and Width (Larg Z) of Tolerance Zone

Conclusions

The aim of this study was to identify whether the zone of tolerance for certain factors causing post-purchase dissonance can be used as a way to reduce or overcome the same. The three organizational factors namely courier delivery service, product details and description, and product display and visuals which causes post-purchase dissonance has been used for the purpose of the study.

The study brings into perspective the identification of the zone of tolerance through zone height and width for the three factors causing post-purchase dissonance. It reveals that for these certain factors the customers through the zone of tolerance can overcome their post-purchase dissonance. It is also observed from the study that the customers have not received the services even to the minimum level for two factors i.e. courier delivery service and the product details and description. The services for the third factor i.e. product display and description has been received more than the minimum accepted.

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