

# THEORIES OF CONSUMER’S SATISFACTION AND THE OPERATIONALIZATION OF THE EXPECTATION DISCONFIRMATION PARADIGM

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**ABSTRACT:** The main paradigm that marks the literature dedicated to consumer’s satisfaction is the Expectation Disconfirmation Paradigm. A lot of theories explaining the nature and the development of consumer’s satisfaction from various perspectives fall under the umbrella of this paradigm.

**KEYWORDS:** expectation, disconfirmation, paradigm, satisfaction

**JEL CLASSIFICATION:** M30

## 1. INTRODUCTION

The basis of understanding the consumer’s satisfaction or dissatisfaction respectively resides in people’s ability of learning from their past experiences. The theory of learning states that: „a certain answer is consolidated both positively and negatively in accordance with the reward implied. The reward leads to an evaluation of the degree of satisfaction in conformity with purchasing, and it can have an influence on the beliefs and attitudes towards a certain brand.” (Dobre, 2005) The possibility of embarking on similar purchasing activities will increase if we perceive the presence of positive consequences in the act of purchasing, or viceversa (Peyton, Pitts, Kamery, 2003, p.41)

Consumer’s satisfaction is regarded by the first conceptualizations as a **singular variable** that implies a **single reaction of consumer’s evaluation, that can or cannot be connected to the concepts of pre-evaluation**. Discussing the conceptualization of consumer’s satisfaction, Hunt (1977) – quoted by Peyton, Pitts and Kamery – observes that „satisfaction means a way of abandoning experience and its evaluation. One can have a pleasant experience that caused dissatisfaction, because no matter how pleasant it was, it did not prove to be as pleasant as expected. **Therefore, satisfaction/dissatisfaction is not an emotion, but the evaluation of an emotion**”.

## 2. THEORIES OF CONSUMER’S SATISFACTION

Several theoretical approaches were used to explain the relationship between disconfirmation and dissatisfaction. (Anderson, 1973) These approaches can be seen as **variations of the consistency theories** and they focus on **the nature of the process of comparing the consumer’s post-usage**.

The theories of consistency suggest that when the expectations and the actual performance of the product do not fit, the consumer will resent a certain amount of tension. In order to get rid of this tension, the consumer will try to adjust both expectations and perceptions on the actual performance of the product.

Some theoretical approaches fall under the umbrella of the theories of consistency (Peyton, Pitts, Kamery, 2003, p.42). We will briefly present their content basing ourselves on the work of Peyton et.al. (2003) and on the synthesis achieved by Vavra (1997).

- A. The theory of assimilation
- B. The theory of contrast
- C. The theory of assimilation-contrast
- D. The theory of negativity
- E. The theory of hypothesis testing

## 2.1. The Theory of Assimilation

Festinger's theory of dissonance (1957) forms the basis for the theory of assimilation. The theory of dissonance states that **the consumer makes a sort of cognitive comparison between the expectations regarding the product and the product's perceived performance**. If there is a discrepancy between expectations and the product's perceived performance, **the dissonance** will not fail to appear. This point of view on post-usage evaluation was introduced in the literature discussing satisfaction under the form of the theory of assimilation. (Anderson, 1973)

According to Anderson, the consumers try to avoid dissonance by adjusting their perceptions of a certain product, in order to bring it closer to their expectations. In a similar way, the consumers can reduce the tension resulted from the discrepancy between expectations and the product's performance, both by distorting the expectations so that they could be in agreement with the product's perceived performance, and by increasing the level of satisfaction through minimizing the relative importance of experimental disconfirmation (Olson and Dover, 1979).

The theory presumes the consumers are motivated enough to adjust both their expectations and their product performance perceptions. If the consumers adjust their expectations or product performance perceptions, dissatisfaction would not be a result of the post-usage process. Consumers can reduce the tension resulting from a discrepancy between expectations and product/service performance either by distorting expectations so that they coincide with perceived product performance or by raising the level of satisfaction by minimizing the relative importance of the disconfirmation experienced (Olson and Dover, 1979) Some researchers have discovered that **the control on the actual product performance** can lead to a positive relationship between expectations and satisfaction. (Anderson, 1973) Consequently, it is assumed that dissatisfaction could never appear unless the evaluation process began with the customers' negative expectations.

Peyton et al (2003) argues that Assimilation Theory has a number of shortcomings. First, the approach assumes that there is a relationship between expectations and satisfaction, but it does not specify the way in which the expectation disconfirmation can lead to satisfaction or dissatisfaction. Second, the theory also posits that consumers are motivated enough to adjust either their expectations or their perceptions about the performance of the product. Some researchers have found that controlling for actual product performance can lead to a positive relationship between expectation and satisfaction. Therefore, it would appear that dissatisfaction could never occur unless the evaluative processes were to begin with negative consumer expectations.

## 2.2. The Theory of Contrast

This theory, first introduced by Hovland, Harvey and Sherif (1957), presents an alternative approach to the evaluation post-usage process that was presented in assimilation theory, in that **post-usage evaluations lead to results in opposite predictions for the effects of expectations on satisfaction** (Cardozo, 1965). Dawes et al (1972) define contrast theory as the tendency to magnify the discrepancy between one's own attitudes and the attitudes represented by opinion statements. This approach states that whenever the customers experiment disconfirmation, they try to minimize the discrepancy between their previous expectations and actual product/service performances, by shifting their evaluations away from expectations. While the theory of assimilation asserts that the consumers will try to minimize the expectation-performance discrepancy, the theory of contrast insists on a surprise effect that can lead to exaggerating the discrepancy.

According to the contrast theory, any discrepancy of experience from expectations will be exaggerated in the direction of discrepancy. If the firm raises expectations in his advertising, and then a customer's experience is only slightly less than that promised, the product/service would be rejected as totally un-satisfactory. Vice-versa, under-promising in marketing communications and over-delivering will cause positive disconfirmation also to be exaggerated (Vavra, 1997,p. 44-60)

## 2.3. The Theory of Assimilation-Contrast

The assimilation-contrast theory was suggested as another way of explaining the relationships between variables within the disconfirmation model (Hovland, Harvey and Sherif, 1957). This paradigm posits that **satisfaction is a function of the magnitude of the discrepancy between expected and perceived performance**.

Generally speaking, the consumers move within acceptance or rejection areas, in accordance with their perceptions. As stated in the theory of assimilation, customers have a tendency of assimilating or adjusting the

differences in product performance perception, with a view of getting them to the level of their previous expectations, but *only if the discrepancy is relatively small* (Peyton et. Al., 2003,p.43). A large discrepancy between perceived performance and expectations results in contrast effects and the consumer’s tendency would be one of increasing the perceived difference. Assimilation or contrast can appear in connection with the disparity perceived between expectations and the actual product performance.

This theory tries to illustrate the fact that both the assimilation and the contrast theory paradigms have applicability in the study of consumer’s satisfaction. Various researchers tried to test this theory empirically. Olson and Dover (1979) and Anderson (1973) found some evidence to support the assimilation theory approach. Referring to these studies, Oliver (1980) argues that there were perceptual differences between disconfirmation or satisfaction.

**2.4. The Theory of Negativity**

This theory, just like the other three, is also based on the disconfirmation process. This theory developed by Carlsmith and Aronson (1963) suggests that any discrepancy of performance from expectations will disrupt the individual, producing ‘negative energy’. Anderson(1973) posits that *when the expectations are strongly sustained, the consumers will negatively answer any information* (Peyton et.al.,2003,p.44) Dissatisfaction will happen if the perceived performance falls beneath expectations, or if the perceived performance goes beyond the expectations.

**2.5. The Theory of Hypothesis Testing**

Deighton. (1983) suggested a two-step model for satisfaction generation. First, Deighton hypothesizes, pre-purchase information (advertising) plays a substantial role in building up expectations. Customers use their experience with product/service to test their expectations. Second, Deighton believes, customers will tend to attempt to confirm rather than disconfirm their expectations. The theory suggests that customers are biased to positively confirm their product/service experiences. It is an optimistic view, but it turns the management of evidence into a very powerful marketing tool (Vavra, 1997, p.47)

**Table 1.** Theories subsumed to the paradigm of expectation disconfirmation

Theory	Product/Service Experience	Effect on Perceived Performance	Moderating Conditions	Effect
Contrast	Positive confirmation Negative disconfirmation	Perceived performance enhanced Perceived performance lowered	-	-
Assimilation Contrast	Small confirmation or disconfirmation Large confirmation or disconfirmation	Perceived performance assimilated toward expectations Perceived performance contrasted against expectations	Purchase is ego - involved	Performance difference exaggerated
Dissonance	Negative disconfirmation	Perceived performance modified to fit with expectations	Purchase made under conditions of ambiguity	Less modification
Generalized negativity	Either confirmation or	Perceived performance	Purchase is ego involved;	More modification

	disconfirmation	lowered	high commitment and interest	
Hypothesis testing	Either confirmation or disconfirmation	Perceived performance modified to fit expectations	Purchase made under conditions of ambiguity	More modification

Source: Vavra (1997, p.46), based on the work of Yi(1990)

### 3. THE PARADIGM OF EXPECTATION DISCONFIRMATION AND ITS IMPLEMENTATION

Disconfirmation is generally defined as the discrepancy between two concepts, respectively the discrepancy between a pre-purchasing standard (such as expectations or desires) and actual performance (Spreng and Page, 2003). The first research work in the field of consumer’s satisfaction and the later studies in the field of service perceived quality (Jiang, Klein and Crampton, 2000; Parasuraman, Zeithaml și Berry, 1988) have observed disconfirmation as the difference between a standard (expectations or wishes) and the perceived level of any attribute. According to Oliver (1980), disconfirmation was evaluated as a distinct cognitive state, subjectively perceived by the consumer, which therefore can be measured irrespective of its antecedents.

The methods of measuring disconfirmation through score differences were operationalized through the difference between the expected (desired or ideal) level of performance, measured before the current usage of the product and the actual performance perception after usage. The situation can be represented by the algebraic expression  $\Sigma(P_i - S_i)$  where  $P_i$  is the perceived performance and  $S_i$  is the expected or desired performance standard for attribute  $i$ , the differences being summed up for all attributes. Parasuraman, Zeithaml and Berry (1994) state that the main advantage of this method is efficiency, each attribute being measured by using two scales only (expectations and performance), three scales (expectations, performance and a direct measure of disconfirmation) becoming unnecessary. The main conceptual criticism given to this method was that disconfirmation is not directly measured, but calculated from other measurements. Therefore, this method implies that consumers use pre-purchasing expectations or desires in determining disconfirmation, which is a questionable matter, as research proved that such expectations are different from the after-usage expectations developed by the consumer (Halstead and Page, 1992). Moreover, when disconfirmation is measured as the difference between expectations (desires) and performance, the score resulted from the difference is a linear function of its antecedents, which means that the linear relationship between the derived operationalizations of disconfirmation and antecedents cannot be evaluated by means of regression. In terms of global satisfaction prediction or global perceived service quality, the difference scores do not lead to better results than those obtained by means of subjective measures. Dabholkar et. al.(2000) discovered that modelling disconfirmation through difference scores can offer a poorer explanation to the perceived service quality ( $R^2=0,48$ ) than the situation in which disconfirmation was measured directly ( $R^2=0,70$ ).

**The Direct Effect Model (DEM)** uses both constructs: standards and perceived performance as direct antecedents of satisfaction. Satisfaction can be expressed as follows:

$$\text{Satisfaction} = \alpha + \beta_1 * P + \beta_2 * E + \varepsilon \quad (1)$$

Spreng and Page (2003) consider that this method has but limited applications in the research dedicated to satisfaction and perceived service quality.

An alternative perspective was the conceptualization of disconfirmation as a „distinct psychological construct including a subjective evaluation of the difference between product performance and comparative standard” (Tse and Wilton, 1988). This method displays a lot of advantages. First of all, as disconfirmation is a distinct psychological state, it must be measured directly, not by derivation from other measures. On the other hand, as the expectations

(desires) and the perceived performance are frequently modelled as antecedents of disconfirmation, the linear relationship between the measure of disconfirmation and its antecedents can be evaluated. Using subjective disconfirmation is conceptually sustained as well: this construct measured after using the product will take into account the possible modifications in the consumer’s expectations. As a person’s perception or memory may change as the result of a product usage experience, subjective disconfirmation can more accurately grasp the consumer’s judgement with regard to the discrepancy between expectations a performance. (Halstead and Page, 1992).

The most frequently used measure of subjective disconfirmation is the one suggested by Oliver (1980), in which the consumers are asked to evaluate the product performance on scales that can be semantically expressed as: „better than I expected/ worse than I expected”. This situation can be operationalized both at product and attribute level. The benefit of this method resides in the direct and simple measurement of disconfirmation. One of the disadvantages of this method is that in applying it to certain standards, such as desires, one must operate on a restricted scale, due to the logical impossibility of obtaining a „better than expected” performance” for attributes with an ideal finite point, because any evaluation different from the desired level will be negatively evaluated. The attributes with an ideal finite point are those for which there is one single point (or series of values) mostly preferred. Spreng and Page (2003) offer the following example: the service speed in a quality atmosphere restaurant is an attribute with an ideal finite point for most customers, slow service speed being negatively evaluated, just as a too quick service speed.

**The Standard-Object Disparity Model** The perceived standard-object disparity model is the method measuring subjective disconfirmation without including an implicit evaluation aspect used by Westbrook and Reilly (1983). They operationalized the „value-perceived object disparity” asking the subjects to evaluate the degree to which their car was gratifying their needs on a 7 = „offers much less than I need” scale, to 1: ”offers exactly what I need”. This measure detects the degree of the standard (needs) – performance discrepancy, but it does not allow the product to exceed the customer’s needs. However, when the standard of comparison is provided by the expectations, it is obvious that performances different from expectations can be evaluated either negatively or positively.

**The Additive Model** of differences uses a non-evaluative subjective measure in which the customers are asked to pass a judgement regarding the discrepancy between what they expected (or desired) and what they got, expressed in terms of „just as I expected” / „very different from what I expected” (Spreng and Page, 2003). In this way, customers are asked to evaluate how close the product was to their expectations, a measure close to the conceptual definition of disconfirmation. The main disadvantage of the additive model method ist that each attribute needs two measures for appreciating disconfirmation.

Disconfirmation operationalization, done according to the five measuring methods analyzed by Spreng and Page (2003), is presented in Table 2.

Table 2. Methods of Disconfirmation Operationalization

<b>Method of Disconfirmation Measurement</b>	<b>Advantages</b>	<b>Disadvantages</b>	<b>Representative Studies (D: desires, values or ideals; E: expectations)</b>
Difference Score (DIFF)	Efficient when measures of the standard and perceived performance are needed	Low reliability, assumes pre use expectations are the same as retrieved expectations.	Swan and Trawick, 1981 (D, E) Tse and Wilton, 1988 (D, E) Myers, 1988 (D, E) Parasuraman, Zeithaml and Berry, 1988 (D) Kettinger and Lee, 1995 (E) Dabholkar, Shepherd and Thorpe, 2000 (E) Jiang, Klein and Crampton, 2001 (E)
Direct Effects Model (DEM)	Does not constrain the effects of the standard and performance to be equal, as do difference scores	Assumes pre use expectations are the same as retrieved expectations.	Edwards, 1994; Brown and Kirmani, 1999 (E); Dabholkar, Shepherd and Thorpe, 2000 (E)

Better than/ Worse than (BTWT)	Straightforward, direct measure	May produce a restriction in range when used with desires; past research has found a lack of relationship with its purported antecedents.	Oliver, 1980 (E) Churchill and Surprenant, 1982 (E) Tse and Wilton, 1988 (E) Cadotte, Woodruff și Jenkins, 1987 (E and norms)
Standard – Percept Disparity (SPD)	Straightforward, direct measure	Does not account for performance that exceeds the standard; does not explicitly include an evaluation of difference.	Westbrook and Reilly, 1983 (D)
Additive Difference Model (ADM)	Close match to conceptual definition of disconfirmation; is a general form of other combinatorial methods	Requires two measures for each attribute.	Spreng, MacKenzie and Olshavsky, 1996 (D, E) Spreng and Mackoy, 1996 (D, E)

**Source:** adapted from Spreng and Page, - A Test of Alternative Measures of Disconfirmation, *Decision Sciences*, 34 (1), 2003, p.34-35

#### 4. CONCLUSIONS

The conceptualization of consumer’s satisfaction is dominated by the paradigm of disconfirmation. However, the operationalization of disconfirmation can be achieved through several methods, all of which have both advantages and disadvantages in accordance with the use context.

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