

INVESTIGATING THE IMPACT OF COGNITIVE DISSONANCE AND CUSTOMER SATISFACTION ON LOYALTY AND COMPLAINT BEHAVIOUR

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ABSTRACT

The concept of cognitive dissonance has been an important construct in consumer behaviour research ever since it was first suggested. However, longitudinal studies on dissonance related to other post-purchase constructs such as satisfaction, loyalty and complaint behaviour are still scarce. In part, this is due to difficulties in the actual measurement of dissonance. Building upon recent contributions, the current study is concerned with the relationship between dissonance and satisfaction and their impact on loyalty and complaint behaviour. One hundred and twenty-five consumers who purchased consumer electronics or household goods were interviewed twice: at the time of purchase and three months afterwards. The results suggest that dissonance and satisfaction are complementary constructs describing different facets of the mental state of the customer after the purchase. Cognitive dissonance and satisfaction govern a different array of actions. While satisfaction has an impact on loyalty, i.e. future purchase intention and word of mouth, cognitive dissonance contributes to the explanation of complaint behaviour.

Keywords: Cognitive Dissonance; Satisfaction; Loyalty; Complaint Behaviour.

1 THEORETICAL BACKGROUND

The concept of cognitive dissonance, originally suggested by Festinger in 1957, has been a popular construct in both psychology and consumer behaviour research. Described as a psychologically uncomfortable state arising from the existence of contradictory (that is dissonant, non-fitting) relations among cognitive elements (FESTINGER, 1957), cognitive dissonance explains the quandary buyers are often in after they have made a purchase. In consumer behaviour research, the interest in cognitive dissonance peaked in the mid-1970s (CUMMINGS; VENKATESAN, 1976; SWEENEY; SOUTAR; JOHNSON, 1996). Subsequently, customer satisfaction, complaint behaviour and loyalty rather than cognitive dissonance have become the focal point of interest in consumer behaviour research (MONTGOMERY; BARNES, 1993). However, there remain gaps in research related to cognitive dissonance which need to be addressed. Specifically, the relationship amongst cognitive dissonance, satisfaction and loyalty deserves closer attention (OLIVER, 1997). Sweeney, Soutar and Johnson (1996) empirically demonstrated that dissonance and satisfaction are distinct constructs with cognitive dissonance being an important antecedent to satisfaction (see, e.g., SWEENEY; SOUTAR; JOHNSON, 1996; OLIVER, 1997; HAUSKNECHT; SWEENEY; SOUTAR; JOHNSON, 1998; SOUTAR; SWEENEY, 2003). Loyalty, in turn, is a well-established consequence of satisfaction (see, e.g., KASPER, 1988; ANDERSON; SULLIVAN, 1993; MOORADIAN; OLIVER, 1997). Consequently, cognitive dissonance promises to be an important link between the purchase and satisfaction and may therefore have a direct or indirect effect on repurchase intentions and other types of loyalty.

The relative scarcity of studies concerning cognitive dissonance as an explanatory construct is unfortunate as it is not due to a lack of the construct's suitability. Rather, considerable difficulties in the measurement of the construct account for the dearth of applications. Cognitive dissonance is, by definition, a fugitive condition. It represents a strong motivational force to overcome the unpleasant status. Therefore a high level of cognitive dissonance is typically followed by individual activities in order to reduce cognitive dissonance. Sweeney, Hausknecht and Soutar (2000, p. 369) pointed out that "there is no well established scale to measure [cognitive dissonance]". Many of the then existing instruments and attempts of measuring cognitive dissonance relied on the consequences of dissonance (e.g., activities aiming to reduce dissonance) and did not refer to the level of dissonance directly (SWEENEY; SOUTAR; JOHNSON, 1996). Recent advances in terms

of how to measure cognitive dissonance in a “real consumption setting” (SWEENEY; SOUTAR; JOHNSON 1996; SWEENEY; HAUSKNECHT; SOUTAR, 2000; SOUTAR; SWEENEY, 2003; SALZBERGER; KOLLER, 2005; KOLLER; SALZBERGER, 2007) contributed to a better understanding of the construct in terms of content, construct, and external validity and offer new opportunities to assess cognitive dissonance. Specifically, Sweeney, Hausknecht and Soutar (2000) and Soutar and Sweeney (2003) developed a multi-dimensional instrument comprising: an emotional component; a dimension term concerning the deal; and a component referred to as wisdom of purchase. The current study builds upon this scale.

Being a fugitive condition, the timing of dissonance measurement is a critical issue. Unless post-purchase dissonance is resolved by returning the product, a resolution of dissonance based upon a reorganisation or change of cognitive elements in the consumer’s mind may impede the consumer’s access to the original state of dissonance. Thus, a retrospective approach of measuring dissonance, when the product has already been in use for an extended period of time, would not reflect accurate levels of post-purchase dissonance. Therefore, a longitudinal approach lends itself much better as an appropriate way of assessing cognitive dissonance. Empirical evidence from a recent longitudinal study suggests that cognitive dissonance, in one way or another, can be present throughout different stages of the entire consumption process. In situations where decisions are made before the actual purchase takes place, cognitive dissonance may occur even prior to the time of purchase (KOLLER; SALZBERGER, 2007; 2009).

In contrast to satisfaction, which has a positive connotation (the customer is usually asked whether (s)he is satisfied and not whether (s)he is dissatisfied), cognitive dissonance is primarily a “negative” construct. Thus, it is not unreasonable to argue that the very act of measuring cognitive dissonance may induce dissonance. In physics, the impact of the measurement instrument on the element to be measured is a well-known fact, at least when extremely high precision is strived for. Such mere-measurement effects have been discussed, for example, in the case of satisfaction (DHOLAKIA; MORWITZ, 2002) and purchase intentions (MORWITZ; FITZSIMONS, 2004). The effect, however, may also be a positive one since the measurement may boost dissonance, hence reducing processes and thereby decreasing the level of dissonance.

2 THE EMPIRICAL STUDY

2.1 DESIGN OF THE STUDY

The objective of this research deals with the interplay of cognitive dissonance and satisfaction and their impact on loyalty and complaint behaviour. While cognitive dissonance is most relevant immediately following the purchase, satisfaction requires an appropriate period of time to experience a product and can only be reasonably measured once the product has had use. Consequently, two measurement points were chosen. Firstly, cognitive dissonance was measured immediately after the purchase (referred to as t0). Secondly, customer satisfaction, loyalty and complaint behaviour were assessed three months after the purchase (referred to as t1). The empirical study was undertaken in two separate outlet stores which sold consumer electronics and household goods. These product categories were chosen for their purchase is typically important enough to potentially trigger cognitive dissonance. On the other hand, the products are not confined to a small target group, but instead, cover the entire population. Customers buying a product with a price of no less than €50 qualified to be interviewed immediately after the purchase (n=250). Interestingly, the sort of product had no impact on the level of dissonance experienced. Likewise there are no significant differences in the price of the product for different levels of dissonance. Three months later (at t1), those who had been initially surveyed and were willing to participate in a second survey (and had identified themselves) were contacted again (n=125). The second questionnaire was administered by direct mail. Respondents who did not use the product for themselves were excluded from the analysis, leading to a final sample of n=110, as it turned out that cognitive dissonance is expressed differently when consumers do not use the product themselves. The sample size, albeit not extraordinarily large, allows for insight into the development of dissonance over time and its relationship to other constructs.

As an extension to previous studies on cognitive dissonance, expected satisfaction was measured at t0 and the measurement of cognitive dissonance was repeated at t1 in order to investigate whether or to what degree dissonance persists over time. If cognitive dissonance were an elusive condition, relevant only directly after the purchase, it should be wholly resolved at t1. Regarding the measurement of satisfaction, after a usage period of three months, respondents have already garnered enough necessary product experience for an appropriate assessment of satisfaction.

In order to obtain evidence concerning mere-measurement effects, two items measuring cognitive dissonance were additionally presented at the beginning of the questionnaire when respondents were unaware of the topic of the study. The responses to these items have been compared to responses to identical questions in the whole set of dissonance items which were administered later in the questionnaire. However, no significant discrepancies could be found in terms of means and variance. Consequently, there is no indication of a strong mere-measurement effect in the data.

2.2 THE MEASUREMENT MODELS

Based on Sweeney, Hausknecht and Soutar (2000), Soutar and Sweeney (2003) and Montgomery and Barnes (1993), an item pool for measuring cognitive dissonance was derived. At both t0 and t1, a two-dimensional model of cognitive dissonance fits the data very well. At any one time, six items are measuring a predominantly cognitive facet of dissonance. The emotional aspect of dissonance is captured by three at t0 and four items at t1. In contrast to the indicators of the cognitive component of dissonance, the indicators of the emotional facet are positively worded. Customer satisfaction is conceptualised as general satisfaction, measured by five indicators. Due to the variety of products, an attribute-specific measure of satisfaction is not suitable. Expected satisfaction is operationalised based on Montgomery and Barnes (1993) and also includes five indicators. Complaint behaviour is measured by three items which refer to complaints made against the manufacturer, the retailer and friends, respectively. Loyalty is separated into loyalty towards the shop and loyalty towards the brand. In both cases, loyalty includes the intention of repurchasing and through word-of-mouth. In contrast to complaint behaviour, word-of-mouth comprises of only milder facets concerning both positive and negative recommendations regarding the shop and the brand.

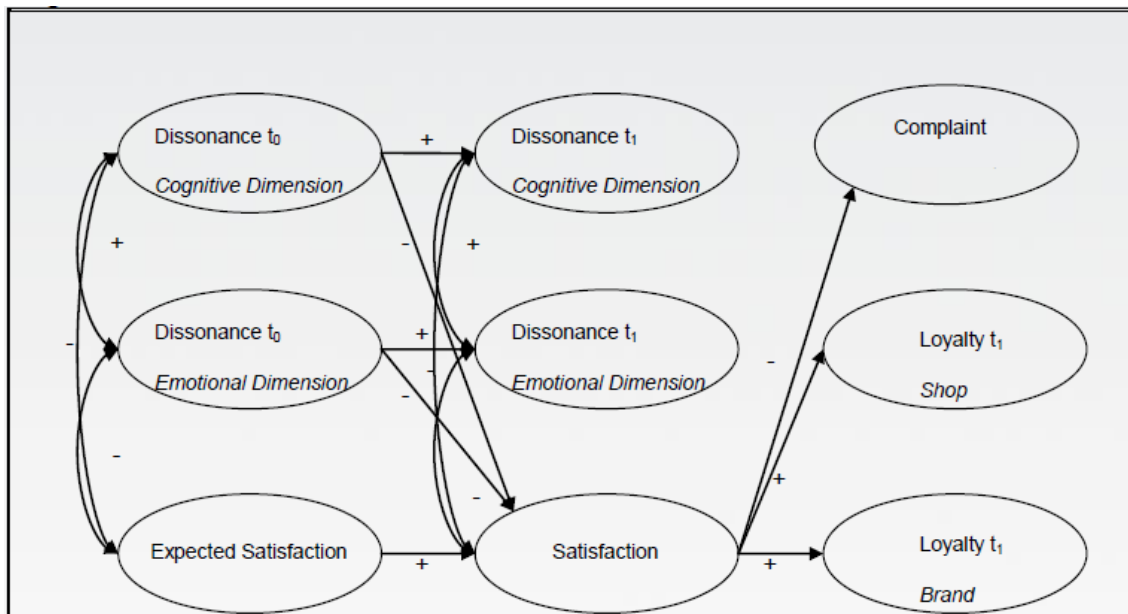
Table 1: Examples of items measuring cognitive dissonance.

COGNITIVE DIMENSION	<ul style="list-style-type: none">• I wonder if I have made the right choice. (Sweeney, Hausknecht and Soutar, 2000, p.381)• I wonder if I should have kept on looking. (Hausknecht, Sweeney, Soutar and Johnson, 1998, p. 125)
EMOTIONAL DIMENSION	<ul style="list-style-type: none">• I am comfortable with the purchase decision I have just made. (Montgomery and Barnes, 1993, p.216)• I feel that I will be happy with the purchase I just made. (Montgomery and Barnes, 1993, p.216)

Source: Compiled by authors.

2.3 THE STRUCTURAL MODEL

Figure 1 illustrates the structural model set up to investigate the research problem. We did not specify a causal relationship between cognitive dissonance and satisfaction within each point in time but instead, assumed a causal impact of dissonance at t0 on satisfaction at t1. Dissonance was expected to be inversely related to satisfaction. Furthermore, we assumed a positive causal relationship between expected and actual satisfaction and amongst actual satisfaction and loyalty and complaint behaviour.

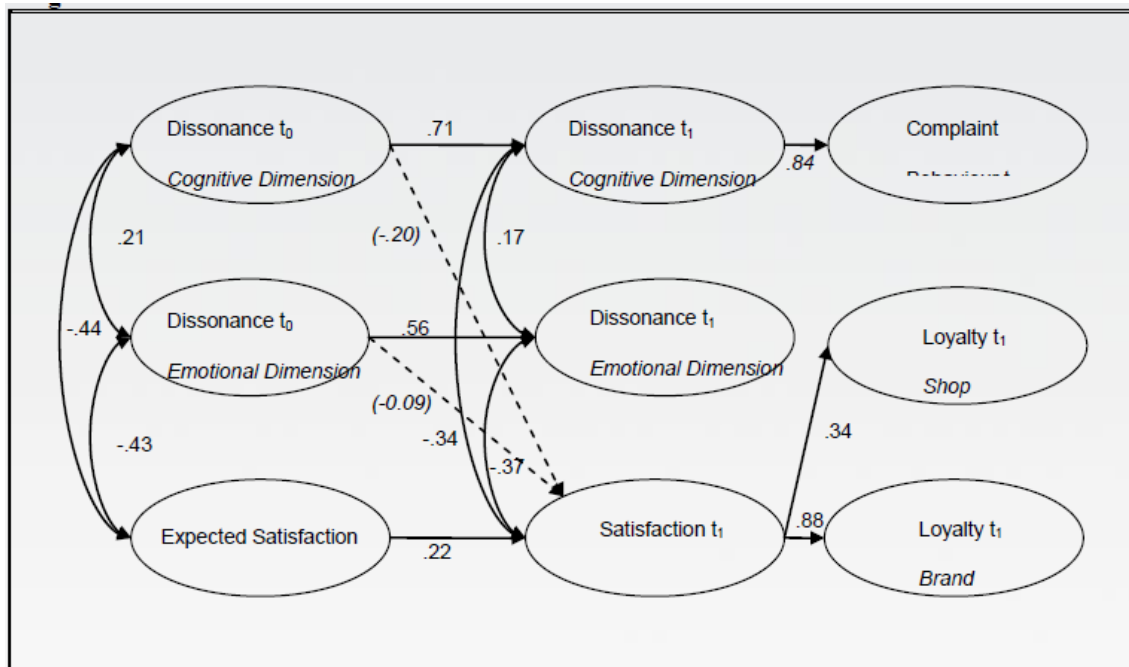
Figure 1: The structural research model

Source: Compiled by authors.

2.4 EMPIRICAL RESULTS

The structural model was tested using Lisrel 8.54 (JOERESKOG; SOERBOM, 2003). Although the overall fit of the research model was not poor, the modification indices indicated the model should be altered. Besides, some path coefficients were not significantly different from zero. At the confirmatory stage of the study, the measurement models were supported. In terms of relationships between cognitive dissonance and satisfaction, the inverse relationship between both dimensions of dissonance on one hand and satisfaction on the other could be empirically substantiated at t_0 (expected satisfaction) and at t_1 (actual satisfaction). The causal relationship between expected satisfaction and actual satisfaction could likewise be supported. However, actual satisfaction was concluded to be related to loyalty towards the shop and towards the brand but not towards complaint behaviour. The causal impact of dissonance at t_0 on satisfaction at t_1 was not significantly different from zero. In contrast, the modification indices suggested a direct causal link between the cognitive dimension of dissonance and complaint behaviour. We therefore decided to alter the model accordingly in an exploratory stage. Figure 2 presents the revised model.

Figure 2: The revised model



Source: Compiled by authors.

The revised model fits the data reasonably well ($\chi^2=945.71$, $df=652$, $\chi^2/df=1.45$; RMSEA=0.053, NNFI/TLI=.94), although the χ^2 test of exact fit is significant. The two dimensions of dissonance, the cognitive and the emotional component, are significantly but relatively weakly correlated. An equality constraint on covariances which were not standard at t₀ and at t₁ was imposed. At t₀, dissonance and expected satisfaction are correlated significantly ($r=-.43$ for the emotional and $r=-.44$ for the cognitive component) but clearly represent distinct constructs. The strength of the relationship weakens only slightly when moving to t₁. ($r=-.37$ and $r=-.34$, respectively).]

There is also a strong relationship between dissonance at t₀ and dissonance at t₁ suggesting that dissonance may not be the elusive phenomenon it is often assumed to be. In fact, the means of dissonance at t₀ and t₁ are not significantly different confirming that dissonance does not dissolve necessarily nor automatically. Dissonance and satisfaction appear to be complementary constructs describing customer mental state after purchase.

Interestingly, dissonance and satisfaction govern different sorts of actions. In line with abundant findings in the literature, satisfaction has an impact on future purchase intention and word

of mouth which are summarised as loyalty in the current study. This is true for loyalty towards the shop and loyalty towards the purchased brand. However, the relationship between satisfaction and loyalty towards the brand was found to be stronger ($\beta=.88$) compared to satisfaction and loyalty towards the shop ($\beta=.34$). Most interesting of all, complaint behaviour is triggered by the cognitive dimension of dissonance ($\beta=.84$) but not directly by a lack of satisfaction.

3 DISCUSSION

The sample size, which is relatively small given the typical standards of structural equation modelling, certainly implies a caveat on the study findings. On the other hand, in a longitudinal setting, the sample size is quite reasonable. From a technical point of view, the study demonstrates that the problems of measuring cognitive dissonance are not insurmountable. The two-dimensional measurement model is proven to be stable over time. No evidence could be found that dissonance dissolves completely over time. Even three months after a purchase, it remains a relevant phenomenon. Consequently, marketing activities aimed at reducing post-purchase dissonance should ideally be pursued over an extended period.

It also seems advisable to include dissonance in recurring corporate studies monitoring customer satisfaction. The reason lies in the interplay of satisfaction and dissonance. Cognitive dissonance seems to be a much more decisive determinant of complaint behaviour than satisfaction. In fact, following the theory of cognitive dissonance, high dissonance is a motivational factor urging the consumer to perform some sort of action in order to abolish the state of discomfort. Filing a complaint represents such an action. While dissonance is related to negative actions (e.g. filing a complaint), satisfaction tends to lead to positive actions (e.g. repurchase intention and behaviour or word of mouth). Consequently, a lack of dissonance has no *negative* consequences, i.e. the consumer does *not* file a complaint. In turn, a lack of satisfaction makes many consumers *not* buy the product again, i.e. it has no *positive* consequences. It is well known that a lack of satisfaction only rarely results in complaints: many consumers prefer to simply switch to other brands or retailers. The intention to switch can also be understood as a strategy of reducing potential dissonance. The cognitions “I have bought the product X” and “I am not satisfied with X” become less dissonant as soon as the cognition “I won’t buy the product again” is added. Consequently, a dissatisfied consumer who does not intend to be loyal won’t develop cognitive dissonance and,

subsequently, won't express his/her dissatisfaction. In contrast, a dissatisfied consumer who wants to be loyal will suffer from dissonance and, consequently, has a higher propensity to complain. Following this perspective, the relationship between dissonance and satisfaction is dependent on the time of measurement. Immediately after the purchase, the consumer will most probably develop dissonance which may have an impact on satisfaction at a later stage. After an extended period of product usage, the consumer develops a certain level of satisfaction. Dissatisfaction then leads to dissonance, especially if the consumer wants to remain a loyal customer. Hence, managing complaints is of the utmost importance, for complaining customers are not only dissatisfied but will also want to remain loyal.

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INVESTIGANDO O IMPACTO DA DISSONÂNCIA COGNITIVA E SATISFAÇÃO DO CLIENTE NA LEALDADE E NO COMPORTAMENTO PÓS-INSATISFAÇÃO

RESUMO

Desde a primeira vez que foi sugerido, o conceito de dissonância cognitiva tem sido uma ferramenta importante no estudo do comportamento do consumidor. Entretanto, estudos longitudinais de dissonância relacionados a outras ferramentas pós-compra como satisfação, lealdade e comportamento pós-insatisfação ainda são escassos. Isto é devido, em parte, às dificuldades em quantificar concretamente a dissonância. Baseando-se em contribuições recentes, o presente estudo trata da relação entre dissonância e satisfação e de seu impacto na lealdade e no comportamento pós-insatisfação. Cento e vinte e cinco consumidores que compraram eletrônicos e produtos domésticos foram entrevistados duas vezes: no momento da compra e três meses depois. Os resultados sugerem que dissonância e satisfação são ferramentas complementares, que descrevem diferentes faces do estado mental do consumidor depois da compra. A dissonância cognitiva e a satisfação governam um conjunto de ações. Enquanto a satisfação tem um impacto na lealdade, i.e. intenção de compra futura e boca a boca, a dissonância cognitiva contribui para explicar o comportamento pós-insatisfação.

Palavras-chave: Dissonância Cognitiva; Satisfação; Lealdade; Comportamento Pós-Insatisfação.

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