Post Purchase Cognitive Dissonance: Impact of Product Involvement, Impulse Buying and Hedonic Consumption Tendencies

Muhammad Abid Saleem  
Lecturer  
NUML, Regional Campus Multan  
Pakistan  
PhD Scholar  
International Islamic University, Islamabad  
Pakistan

Rao Akmal Ali  
Lecturer  
NUML, Regional Campus Multan  
Pakistan

Saeed Ahmad  
Lecturer  
NUML, Regional Campus Multan  
Pakistan

ABSTRACT

This study proposed and empirically verified the impact of product involvement, hedonic consumption tendencies and impulse buying tendencies on cognitive dissonance. Analyses of a sample of 422 students, drawn from different universities of twin cities, revealed interesting findings. Hedonic consumption tendencies was found insignificant in predicting cognitive dissonance but product involvement and impulse buying were significant in predicting cognitive dissonance being former having inverse relation and latter having direct relation. Further to this, impact of product involvement and hedonic consumption tendencies were found directly relational to impulse purchase. Product category wise exploration of this model can add new dimensions and findings in future.

Keywords: Impulse Purchase, Cognitive Dissonance, Product involvement, Hedonic Consumption Tendencies
1. Introduction

In dynamic business environment, marketers have always been trying to not only acquire new customer base but also retain the existing one by providing value, satisfying customers’ exchange expectations. It has been found that customer retention is highly associated with customer satisfaction and customer satisfaction not only retains the customer with the company but also affects revenue, earning per share and stock price (Williams and Naumann, 2011). Literature documents very strong association between customer satisfaction and service quality; service quality having very important role in determining the level of satisfaction attained and further behavioral intentions by the customer (Varela-Neira, et al., 2010). Among various other aspects of service quality, after sales service holds very important role. After sales service reduces the negative feelings of the customers after having purchased a product that doesn’t fit their exchange expectations. The gap between the expected performance of certain product, against an exchange of certain amount of money, and its actual performance creates post purchase regret which leads to customer dissatisfaction. Based on theory of Festinger (1957), cognitive dissonance is a kind of uncomfortable feeling being ridden by an individual due to having conflicting beliefs. Cognitive dissonance is reported to have an inverse relationship with service quality (Neill and Palmer, 2004).

Concept of cognitive dissonance was first coined by Leon Festinger where he discriminated between two opposing beliefs being held by an individual to be cause of cognitive dissonance (Festinger, 1957). Festinger (1957) further holds that the individual being captured by unpleasant cognitions is psychologically compelled to take remedial measures to get rid of this dissonance and attain consonance. In shopping behavior, this negative state arises when there is substantial difference between the expected performance of some product being purchased and its actual performance. The negative dissonance that has been developed due to underperformance of certain product pushes the customer to bring in attitudinal changes for future behavior in accordance to the notion of dissonance reduction (Harmon-Jones et. al, 2009).

Intensity of cognitive dissonance highly depends on the individual traits being possessed by the customer and the variables causing dissonance (Harmon-Jones et. al, 2009). Customer purchasing traits, personal fear of invalidity, desire for structured life, negative state of mind and subjective-well being are a few to name, that have been tested and found to have significant relation with cognitive dissonance (Thompson et. al, 1989; Beck et. al, 1979; Diener et. al, 1985; Ryff and Keyes, 1995).

This research study is an attempt to identify relationship of cognitive dissonance with various shopping traits possessed by customer. These are hedonic consumption tendencies, impulse buying tendencies and the product involvement. Literature documents no research so far in which these all have been checked for their relationship with cognitive dissonance.

2. Literature Review

2.1. Impulse Buying

Being researched over least 6 decades, impulse buying holds very important position in marketing decision making. It has been explained as a tendency of making “spontaneous”, “unreflective”, “immediate”, “kinetic”, sudden and unplanned purchases; buying without any need been recognized initially; an emotional experience and a behavior related to “immaturity” (Rook and Fisher, 1995; Thompson et al., 1990; Engel and Blackwell, 1982; Rook, 1987). Impulse buying has got cognitive and affective parts, former related with planning and latter with situational factors stimulating impulse spur causing impulse purchases (Verplanken and Herabadi, 2001). In most of purchases, impulse buying has been proved to be a significant method of choosing product as it provides hedonic reinforcement and reduces overload of selection (Hauseman, 2000). Research in impulse buying exploring relation of impulse buying with individual traits reveals the fact that cognitive component of impulse buying is negatively associated with subjective well being, a, where as affective component is linked to negative affect and customer susceptibility to interpersonal influence, a measure of social influence (Silvera et al., 2008). Earlier research, however, also prove empirically that impulse purchase is not merely function of personal traits, or what we say impulse buying tendency, rather the type of product also has significant impact on this phenomenon.

Gender differences in impulse buying behavior and impulse buying tendency, in purchase of various product categories, have also been found significant in earlier researches (Coley and Burgess, 2003).
Impulse buying tendency has been found to have very interesting relation with cognitive dissonance in literature. According to George and Yaojunyeong (2010), impulse buying tendency is a coping strategy to reduce discomfort and bring consistency in conflicting beliefs. Impulse buying tendency in this way is inversely related to cognitive dissonance.

With the help of literature following hypothesis is drawn,

H1. Impulse buying tendencies are inversely related to cognitive dissonance

2.2. Product Involvement

Product involvement refers to "the general level of interest in the object, or the centrality of the object to the person’s ego-structure" (Day, 1970, p. 45). Product involvement simply refers to the attributes linked to certain product relative to customer such as its importance, meanings, value, strength of relationship between customer and product and level of psychological and affective relationship between product and customer (Howard and Sheth, 1969; Laurent and Kapferer, 1985; Bowen and Chaffee, 1974).

Product involvement in traditional store shopping set up, is positively associated with impulse buying tendencies when it comes to apparel purchase whereas, the same is absent in online setup of apparel product shopping (Chen, 2008). On the other hand, product involvement, in purchase of computers, is associated positively with impulse buying behavior in on line purchase set up (Chen, 2008). These findings point towards another facet of product involvement that the characteristics of the product associated with hedonic and sensual feelings compel its impulse purchase, if the product is available for direct appraisal of these characteristics.

H2. Product involvement is directly related to impulse purchase tendencies.

Research on cognitive dissonance shows that cognitive dissonance is in fact a state of mind ore a kind of guilt that arises once the purchased product fails to fulfill the expected performance (Festinger, 1957). Products with low involvement have been reported to cause greater post consumption cognitive dissonance than those with high involvement (Gbadamosi, 2009).

H2a. Product involvement is inversely related to cognitive dissonance.

2.3. Hedonic Consumption Tendencies

Hedonism has been defined as “the doctrine that pleasure is the highest good; the pursuit of pleasure; a life-style devoted to pleasure-seeking" (The Chambers Dictionary, 1993). Hedonic consumption tendency in general may refer to as traits of individual to engage in activities resulting in pleasure and relief in tension. Bentham (1789) holds that pain or pleasure is a main drive to direct the actions of the human being. Delight, joy, elation, ecstasy and enjoyment are a few declared dimensions of hedonism (Andrew, 2008).

Literature documents very strong relationship between shopping experience and hedonic tendencies. Hedonic experience is related with pleasure, arousal, fantasies, feelings and fun (Campbell, 1987; Hirschman and Holbrook, 1982). Pursuit of pleasure is related to sensual products having hedonic attributes; hence gain attention of the customers with higher hedonic tendencies (Hirschman and Holbrook, 1982).

Action-Based model of dissonance states that individuals try to neutralize aversive state and attain consonance to bring equilibrium between conflicting beliefs (Harmon-Jones 1999). This may give rise to certain actions, that otherwise are not rational, and may result in to certain hedonic consumptions. Individuals with hedonic consumption tendencies, hence, may end up with low cognitive dissonance than those with utilitarian tendencies. We may then hypothesize that,
H3. Hedonic consumption tendencies are inversely related to cognitive dissonance.

H3a. Hedonic consumption tendencies are directly related to impulse purchase tendencies.

Following conceptual framework is identified in the light of various relationships among different variables established earlier,

![Conceptual Framework](image)

3. Methodology

450 students from different universities of twin cities were approached directly, during various sessions, to get data. Other than impulse buying tendency scale, for rest of questions, students were given a scenario to recall back their last purchase undertaken impulsively and answer the questions pertaining to cognitive dissonance, hedonic consumption tendency and product involvement.

3.1. Sample Characteristics

Out of 450 students taken as a sample, 422 useful responses were chosen for analysis. 28 questionnaires were rejected due to missing values and non-serious response. Mean age of the respondents appeared out to be 22 years. Out of 422 respondents 131 were females that constitutes 31% of the sample and 291 were males that constitute 69% of sample. Again the criticism on the student sample raised by Wells, 1993 and well addressed by George and Yaoyuneyong (2010), does also apply to this study as the segment chosen to study the underlying research question is substantial and constitutes major impulse purchase in the society.

3.2. Measurement Instrument

Self administered questionnaire was used to collect data and the scale for operationalization of the variables, used in the study, was adopted from various researches done in past.

Impulse buying tendency scale (IBTS) was adopted from Verplaken and Herabadi (2001), cognitive dissonance from Sweeney et al. (2000), product involvement from Mcquarrie and Munson (1992) and hedonic consumption tendency scale was adopted from Hausman (2000).
Table 1

Reliability of Scale

The reliability of scale for various variables and dimensions, used in this study, is shown in Table 1.

Over all internal reliability of the instrument remained satisfactory with alpha value of 0.905. Individual analysis of reliability for various variables also showed satisfactory results having Impulse buying tendency scale 0.808, emotional dimension of cognitive dissonance 0.848, wisdom 0.738, and concern over deal 0.768, product involvement 0.793 and hedonic consumption tendency 0.722.

<table>
<thead>
<tr>
<th>Variable / Scale</th>
<th>Dimension</th>
<th>Cronbach Alpha (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over all Reliability of Instrument</td>
<td>-</td>
<td>0.905</td>
</tr>
<tr>
<td>Impulse Buying / Impulse Buying Tendency Scale (IBTS)</td>
<td>Impulse Buying</td>
<td>0.808</td>
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<td></td>
<td>Emotional</td>
<td>0.848</td>
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<tr>
<td>Cognitive Dissonance</td>
<td>Wisdom</td>
<td>0.738</td>
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<tr>
<td></td>
<td>Concern over deal</td>
<td>0.768</td>
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<tr>
<td>Product Involvement</td>
<td>-</td>
<td>0.793</td>
</tr>
<tr>
<td>Hedonic Consumption Tendency</td>
<td>-</td>
<td>0.722</td>
</tr>
</tbody>
</table>

4. Data Analysis and Discussion

In this section, the results obtained from the analysis of data are presented and findings along with its possible implications are discussed.

4.1 IBTS, Product Involvement and Hedonic Consumption Tendency – CD relationship

Multiple Regression was carried out having impulse buying tendency, product involvement and hedonic consumption tendencies as independent variables and cognitive dissonance as dependent variable. The results are summarized in Tables 2, 2a and 2b.

Model summary divulges that impulse buying, product involvement and hedonic consumption tendencies predict 37% variation in cognitive dissonance. ANOVA table implies that prediction is statistically significant at \( p < 0.05 \).

However, table 2b shows that product involvement and impulse buying tendency are significant in predicting cognitive dissonance having \( t-values \ -5.750 \ and 10.286 \) respectively at \( p < 0.05 \) whereas, hedonic consumption tendency is insignificant in prediction having \( t-value \ 0.262 \) at \( p > 0.05 \) i.e. 0.793. Beta coefficients presented in table 2b show that product involvement has inverse whereas impulse buying tendencies have direct relation ship with cognitive dissonance with \( \beta \) values -0.280 and 0.439 respectively.

Statistical results presented in Table 2b approve hypothesis H2a but disapprove hypotheses H3 and H1.

Rejection of Hypothesis H1 contradicts with theoretical assumptions built in earlier parts of this study and results of earlier research done by George and Yaoyuneyong (2010), but a different line of reasoning and literature can bring sense of it. Various studies hold that high involvement in purchase process leads to high control on post purchase conflicting cognitions; even if the exchange expectations are not met, but in impulse purchase there is low involvement in purchase process hence, in case of impulse purchase the level of post purchase regret may rise (Rook and Fisher; 1995, Mittal, 1989; Venkatraman 2006; Zaichkowsky, 1985), which is in accordance to the results of present study.
4.2 Product Involvement and Hedonic Consumption Tendency – IBTS relationship

Multiple Regressions was again run to describe impact of product involvement and hedonic consumption tendency on impulse buying tendency. The results are summarized in Tables 3, 3a and 3b.

Model summary reveals that product involvement and hedonic consumption tendencies estimate 17 % variation in Impulse Buying Tendency. ANOVA table empirically verifies that prediction is statistically significant at \( p < 0.05 \).

Table 3b shows that product involvement and hedonic consumption tendency are significant in predicting impulse buying having \( t \)-values 4.594 and 4.164 respectively at \( p < 0.05 \). Beta coefficients presented in table 3b show that product involvement and hedonic consumption tendency have direct relationship with impulse buying tendency with \( \beta \) values 0.249 and 0.226 respectively.

Statistical results presented in Table 3b approve hypothesis H2 and H3a.

In the light of statistical results Figure 2 gives an estimated model of this study.

Table 2

Regression Analysis Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
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<tr>
<td>1</td>
<td>.611(^a)</td>
<td>.373</td>
<td>.369</td>
<td>.49603</td>
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</table>

\(^a\) Predictors: (Constant), hedonic consumption tendencies, IBTS, product involvement

Table 2a

ANOVA Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
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<td>3</td>
<td>20.421</td>
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<td></td>
<td>Residual</td>
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<td>418</td>
<td>.246</td>
<td></td>
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<tr>
<td></td>
<td>Total</td>
<td>164.112</td>
<td>421</td>
<td>.246</td>
<td></td>
</tr>
</tbody>
</table>

\(^b\) Predictors: (Constant), hedonic consumption tendencies, IBTS, product involvement

b. Dependent Variable: cognitive dissonance

Table 2b

Coefficients in Regression Analysis

<table>
<thead>
<tr>
<th>N</th>
<th>Independent Variables</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Beta</th>
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<tbody>
<tr>
<td>IBTS</td>
</tr>
<tr>
<td>Product Involvement</td>
</tr>
<tr>
<td>Hedonic Consumption Tendencies</td>
</tr>
</tbody>
</table>

Dependent Variable: Cognitive Dissonance
Table 3

Regression Analysis Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.423a</td>
<td>.179</td>
<td>.175</td>
<td>.50540</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), hedonic consumption tendencies, product involvement

Table 3a

ANOVA Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Regression</td>
<td>23.270</td>
<td>2</td>
<td>11.635</td>
<td>45.550</td>
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<tr>
<td></td>
<td>Residual</td>
<td>107.023</td>
<td>419</td>
<td>.255</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>130.293</td>
<td>421</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), hedonic consumption tendencies, product involvement
b. Dependent Variable: IBTS

Table 3b

Coefficients in Regression Analysis

<table>
<thead>
<tr>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
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<tr>
<td>N</td>
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<tr>
<td>Independent Variables</td>
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<td></td>
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<tr>
<td>Product Involvement</td>
<td>0.249</td>
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</tr>
<tr>
<td>Hedonic Consumption Tendencies</td>
<td>0.226</td>
<td>4.164</td>
</tr>
</tbody>
</table>

Dependent Variable: Impulse Buying
5. Limitations of the Study and Directions for Future Research

Although choice of student sample constitutes very important portion of target population and revealed interesting information in this study, still the verification of model on different sample category remain an interesting avenue to be explored.

When it comes to product involvement and impulse purchase, the importance of product category rise many fold. Exploring implication of the suggested model on specific product categories may unveil novel dimensions.

Level of cognitions may vary with variations in demographic profiles of the customers. Post purchase cognitive dissonance may also vary with reference to Gender, age groups and on available disposable income. Exploring these dimensions may also bring out interesting implications in future research.
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