



**THE FACTORS IMPACT ON POST PURCHASE DISSONANCE OF
LAPTOP COMPUTERS AMONG UNDERGRADUATE STUDENTS:
WITH SPECIAL REFERENCE TO VAVUNIYA CAMPUS OF THE
UNIVERSITY OF JAFFNA, SRI LANKA**

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ABSTRACT

Marketers have the inevitable role in determining consumer behavior however the importance of post purchase dissonance in consumer post purchase behavior cannot be denied. The purpose of this study is to identify the factors impact on post purchase dissonance of laptop computers among undergraduate students in Vavuniya Campus of the University of Jaffna, Sri Lanka. A structured questionnaire was issued within the sample of 172 respondents yield 70% response rate, using stratified random sampling method. The findings of this study derived through simple regression analysis confirmed that the factors emotional discomfort, wisdom of purchase, concern over deal, product alternatives and opinion leadership are contributed to be the major antecedents to create post purchase dissonance. Moreover, the study also confirmed that post purchase dissonance towards Slow Moving Consumer Goods (SMCG) is higher. In supports of the past findings, the present study insights that the marketers should provide direction to post purchase dissonance through customer reinforcement, relationship marketing, low-pressure-selling and timely innovations to remain their customers happy and satisfied for the long term sustainability of the organizations.

KEY WORDS: *Consumer Behavior, Concern over Deal, Opinion Leadership, Post Purchase Dissonance, Slow Moving Consumer Goods, Wisdom of Purchase.*

1. INTRODUCTION

Marketers have the inevitable role in determining consumer behavior however the importance of post purchase dissonance in consumer post purchase behavior cannot be denied. Therefore, post purchase evaluation is very crucial stage of determining whether consumers are satisfied or not. The level of satisfaction is determined by two variables: customer expectation and organizational perception. When the perception exceeds expectation, satisfaction occurs and when the perception could not meet the expectation, post purchase dissonance results in dissatisfaction adversely.

Post purchase dissonance is eventually occurred after the purchase when a buyer starts to question himself about the positive and negative aspects of that transaction and it turned into conflicting thoughts in the mind of the buyer. Further, post purchase dissonance mostly results while making a purchase of high involvement products when it comes to shopping or speciality products [1],[2],[3].

As being SMCG, in the purchase of laptops the level of post purchase dissonance is high. The undergraduate students who are very familiar and frequently using laptops are experiencing post purchase dissonance by feeling difficulties due to sudden repairs, problems in performances and maintenances. This might result in frequent complaints, switching intention, product returns, negative word of mouth, customer negative feedbacks and unfavorable image which lead to dissatisfaction levels. Therefore, it is very important to identify the factors impacting on post purchase dissonance to eliminate them as post purchase dissonance has become as a major challenge in the marketing literature.

Following are the specific objectives derived by the researchers.

- To explore the factors impacting on post purchase dissonance of laptop computers among undergraduate students in Vavuniya Campus of the University of Jaffna.
- To examine its implications for consumers and marketers.
- To recommend remedial actions to reduce post purchase dissonance of laptop computers.

2. LITERATURE REVIEW

Post Purchase Dissonance

According to the Theory of Cognitive Dissonance, if there any conflict thought occurs in human mind which leads to the discrepancy between the beliefs of consumers and any information regarding that is referred as cognitive dissonance[4].This conflicting thought arises when the consumer starts questioning his own wisdom whether he has made the right decision by purchasing the product. Along with the purchase, the consumer starts assessing the negative attributes of the purchase product and he forgets about the positive attributes which creates dissonance in his mind[5].

There are three main conditions for creating dissonance. Firstly, a consumer must give value to the decision. The consumer gives more important to the product with the contribution of financial and psychological costs. The outcomes of the product must be a matter to the consumer. Secondly, the consumer must consider himself as free to make the choice with his high degree of involvement. Thirdly, the consumer must show irrecoverable commitment to the decision made [6], [7].

Consumer's satisfaction or dissatisfaction is determined by the overall feelings or attitude of a person towards a purchased product. The dissonance occurs before even the consumers makes a determination concerning whether a product or service is satisfactory. It is the feeling of uncertainty about whether the right choice is being made [8]. Discomfort or dissonance occurs when a consumer holds conflicting thoughts about a belief, an attitude or an object. When a cognitive dissonance occurs after a purchase, it is called as post purchase dissonance [9].

The post purchase towards the SMCG is higher than the FMCG (Fast Moving Consumer Goods). Further Beliefs, customs, family background, emotional reaction, personal performance, culture, religious value and peer group influence are the deciding factors of the post purchase dissonance and word of mouth communication plays a powerful role in the determination of post purchase dissonance among Sri Lankan buyers[10].A consumer's post purchase dissonance is evaluated with the constructs of external information search, complaint intention and switching intention where the three dimensions emotional discomfort, concern over deal and wisdom of purchase are estimated to be the antecedents to create post purchase dissonance towards smart phones as being a high involvement product[11].

Factors influencing Post Purchase Dissonance

The 22-item scale of assessing dissonance proposed by Sweeney *et al.* (2000) which consists of three dimensions emotion, wisdom of purchase and concern over deal has used in this research study to measure the level of dissonance and identify the factors impacting post purchase dissonance. Further, there were other factors found through the literature.

Emotional discomfort

Emotional dimension is defined as “a person’s psychological discomfort subsequent to the purchase decision”. Many of the emotional items are representing emotional aspect of dissonance refer to a negative end of the pleasure dimensions such as angry, frustrated, annoyed. Besides, cognitive items refer to the feelings about the wisdom of purchase decision that took place[7].

H₁: Emotional discomfort has significantly positive impact on post purchase dissonance of laptop computers among undergraduate students in Vavuniya Campus.

Wisdom of purchase

The wisdom of purchase dimension is defined as “a person’s recognition after the purchase has been made that they many have been needed the product or may not have selected the appropriate one.” The wisdom of purchase is a matter when the consumers start questioning about the purchased product against their wisdom whether the product is needed or have made the right choice or else, the consumer has gone right decision by purchasing the product [7].

H₂: Wisdom of purchase has significantly positive impact on post purchase dissonance of laptop computers among the undergraduate students in Vavuniya Campus of the University of Jaffna.

Concern over deal

Concern over deal dimension is defined as “a person’s recognition after the purchase has been made that he may have been influenced against his own beliefs by sales staff”. In this case, consumers start to assess themselves they bought the product alone or any pressure made by salespeople or they have been fooled over the purchased product [12], [13], [7].

H₃: Concern over deal has significantly positive impact on post purchase dissonance of laptop computers among undergraduate students in Vavuniya Campus of the University of Jaffna.

Product alternatives

Due to the comparison of the alternatives available in a purchase, consumers feel mental discomfort where they have to make one choice out of many alternatives when there is high selectivity and confusion and complexity of considering every possible alternative course of action [14], [15], [16]. On the other hand, After the purchase is over, the unattractive features of the purchased product grow in importance as do same for attractive features of the rejected alternatives [17], [18].

H₄: Product alternative has significantly positive impact on post purchase dissonance of laptop computers among undergraduate students in Vavuniya Campus of the University of Jaffna.

Opinion leadership

Influence of other people might create post purchase dissonance. Further consumers listen to the opinions of people who are very close to them and individuals seek acceptance from others, especially reference groups for purchase will be important and effect on dissonance [19], [20].

H₅: Opinion leadership has significantly positive impact on post purchase dissonance of laptop computers among undergraduate students in Vavuniya Campus of the University of Jaffna.

Factors expressing Post Purchase Dissonance

Complaint intention

Consumer complaint behavior is reacted through three dimensions; complaint to the seller, switching company and negative word of mouth [21], [22].

Switching intention

The term refers to the probability or willingness of exchanging the current brand/company with another. Switching intention, customer retention, repurchase intention and complaint

intention are all related where first three represent favorable outcomes and latter presents unfavorable outcomes of the company [23].

Product return

In some cases, the customer will be pleased with the experience and will buy the same product from the same supplier again. In other cases, the customer will be disappointed and may even return or exchange the product [24].

3. METHODOLOGY

Conceptual Framework

Based on the careful review of the literature, the hypotheses and the conceptual framework were developed to support the present study. This conceptual framework explains about the relationship between post purchase dissonance (consists of complaint intention, switching intention and product return) as dependent variable and the factors emotional discomfort, wisdom of purchase, concern over deal, product alternatives and opinion leadership as independent variables.

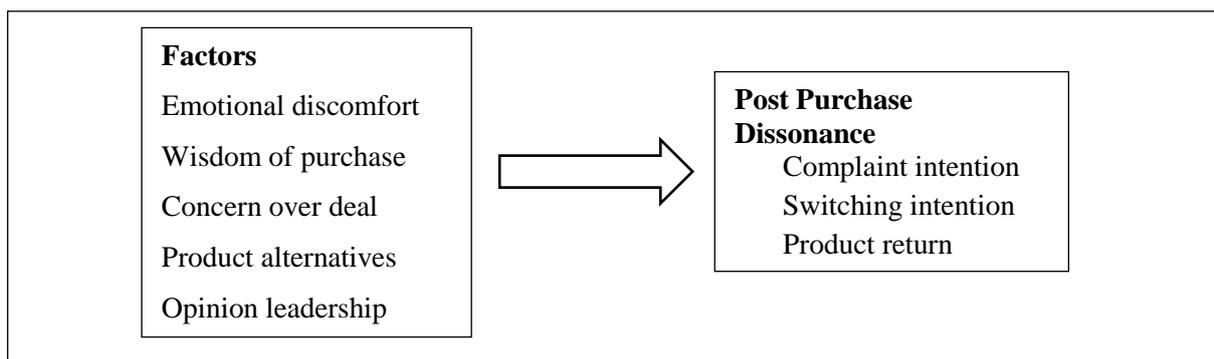


Figure 1. Conceptual Model

Source: Sweeney et al.,2000; Czinkota et al.,2001; Solomon et al., 2006; Graff et al., 2012;Demirgunes and Avcilar,2017

Sampling and Data Collection

As this study is carried out to evaluate the factors impact on post purchase dissonance of laptops among undergraduates in Vavuniya Campus, from the population (860 students), the researchers attempted to purposefully selected the sample size of 172 with contribution to 20% of each stratum representing the different elements of gender, age and batches using stratified random sampling method. The researchers developed the structured questionnaire by adapting 22-item scale of Sweeney *et al.* (2000) and the developed scale of Demirgunes

and Avcilar (2017) to collect the data from the respondents. The questionnaire was measured by a five-point Likert scale from 1 to 5, rating from strongly disagree to strongly agree.

Among the 172 respondents, 120 fully completed questionnaires which were above 70%, carefully sorted out and entered into the Statistical Package for Social Science 20.0 package for the analysis purpose. A pilot test was undertaken to assess the reliability of the dimensions in the questionnaire. The results showed that the Cronbach's alpha value for all the dimensions ranging from 0.801 to 0.896, were quite high, internally consistent and reliable.

4. DATA ANALYSIS AND FINDINGS

Demographic Profile

The data is collected from undergraduates of both Faculties (Business Studies 51% and Applied Science 49% based on stratified sampling method, strata as 1st year 35%, 2nd year 27%, 3rd year 27% and 4th year 11%. The respondents consist of female by 63% and male by 37%. Majority of the respondent's family income level dominated by 49% of them earn an income level of Rs.20000-60000. Dell is the most preferable laptop brand popular among the undergraduates contributes to 40%. As well as undergraduate students mostly gone for installment methods (40%).

Regression analysis

Regression analysis is used for measuring the impact of hypotheses by identifying the impact of independent variables on the dependent variable. The researchers have used the simple regression analysis to analyze how far the independent variables (emotional discomfort, wisdom of purchase, concern over deal, product alternatives and opinion leadership) have an impact on post purchase dissonance.

Table 1. Regression Analysis for independent variables on Post Purchase Dissonance.

Dependent Variable- Post Purchase Dissonance	Independent Variables	R Value	R Square	Ad. R Square	Beta Value	F Value	Sig.
	(Constant)	0.543 ^a	0.295	0.289	2.162	49.261	.000
	Emotional Discomfort				0.543		.000
	(Constant)	0.431 ^a	0.186	0.179	2.602	26.889	.000
	Wisdom of purchase				0.431		.000
	(Constant)	0.516 ^a	0.266	0.260	2.302	42.778	.000
	Concern over deal				0.516		.000
(Constant)	0.580 ^a	0.337	0.331	2.103	59.858	.000	
Product alternatives				0.580		.000	
(Constant)	0.688 ^a	0.474	0.470	1.656	106.347	.000	
Opinion leadership				0.688		.000	

The above table shows the regression analysis which has carried out to examine the impact between the independent variables emotional discomfort, wisdom of purchase, concern over deal, product alternatives and opinion leadership on post purchase dissonance. In the case of emotional discomfort, adjusted R square is 0.289 which means emotional discomfort was able to explain 28.9% of variance in post purchase dissonance. A significant simple linear regression equation was found $F= 49.261, P<0.05$. Emotional discomfort has significantly positive impact on post purchase dissonance by 54.3% ($B=0.543, P<0.05$). In the case of wisdom of purchase, adjusted R square is 0.179 which means average wisdom of purchase was able to explain 17.9% of variance in post purchase dissonance. A significant simple linear regression equation was found $F= 26.889, P<0.05$. Average wisdom of purchase has significantly positive impact on post purchase dissonance by 43.1 % ($B= 0.431, P<0.05$). In the case of concern over deal, adjusted R square is 0.260 which means concern over deal was able to explain 26% of variance in post purchase dissonance. A significant simple linear regression equation was found $F= 42.778, P<0.05$. Concern over deal has significantly positive impact on post purchase dissonance by 51.6% ($B=0.516, P<0.05$). In the case of product alternatives, adjusted R square is 0.331 which means product alternatives were able to explain 33.1% of variance in post purchase dissonance. A significant simple linear regression equation was found $F=59.858, P<0.05$. Product alternatives have significantly positive impact on post purchase dissonance by 58% ($B=0.580, P<0.05$). Finally, in the case of opinion leadership, adjusted R square is 0.470 which means opinion leadership was able to explain 47% of variance in post purchase dissonance. A significant simple linear regression equation was found $F= 106.347, P<0.05$. Opinion leadership has significantly positive impact on post purchase dissonance by 68.8% ($B=0. 0.688, P<0.05$). Therefore, it is acceptable that all the null hypotheses H_0 are rejected and all the alternative hypotheses from H_1 to H_5 are accepted.

Table2.Model Summary

Dependent Variable	Independent Variable	R	R Square	Ad. R Square	Beta Value	F Value	Sig.
Post Purchase Dissonance	(Constant) Factors	0.731 ^a	0.534	0.530	0.740 0.731	135.30	.000 .000

The above table shows that R value is 0.731 which indicates a high degree of correlation. The adjusted R square is 0.530 which means the factors identified by the researchers was able to explain 53% of variance in post purchase dissonance. A significant simple linear regression

Equation was found $F= 135.305$, $P<0.05$. So, the factors including (emotional discomfort, wisdom of purchase, concern over deal, product alternatives and opinion leadership) are significantly positive impact on post purchase dissonance by 73.1% ($B=0.731$, $P<0.05$).

Table 3.Hypotheses Testing

Hypotheses	Beta	Ad. R ²	Sig.	Result
H ₁ : Emotional discomfort has significantly positive impact on post purchase Dissonance of laptop computers.	0.543	0.289	0.000	Accepted
H ₂ : Wisdom of purchase has significantly positive impact on post purchase Dissonance of laptop computers.	0.431	0.179	0.000	Accepted
H ₃ : Concern over deal has significantly positive impact on post purchase Dissonance of laptop computers.	0.516	0.260	0.000	Accepted
H ₄ : Product alternatives has significantly positive impact on post purchase Dissonance of laptop computers.	0.580	0.331	0.000	Accepted
H ₅ : Opinion leadership has significantly positive impact on post purchase Dissonance of laptop computers.	0.688	0.470	0.000	Accepted

As this research is carried out to evaluate the impact of factors (emotional discomfort, wisdom of purchase, concern over deal, product alternatives and opinion leadership) on post purchase dissonance of laptop computers among undergraduate students of the Vavuniya Campus of the University of Jaffna based on the objectives. Hypotheses were developed to test the impact of variables on post purchase dissonance. Finally, the findings are derived from the study shows that the hypotheses which were developed to identify the impact of emotional discomfort, wisdom of purchase, product alternatives and opinion leadership have been proved from H₁ to H₅ indicating that they are significantly positive impacting on post purchase dissonance. Therefore, all above objectives and hypotheses are achieved and accepted.

Based on the results, opinion leadership has to be considered as the major predictor of determining post purchase dissonance as it has the highest impact on post purchase dissonance by 68.8% as well as product alternatives are contributed as second largest factor to create post purchase dissonance by 58%. Further it illustrates the independent variables

such as emotional discomfort (54.3%), wisdom of purchase (43.1%) and concern over deal (51.6%) have the impact on post purchase dissonance of laptop computers among undergraduate students in Vavuniya Campus. These variables (emotional discomfort, wisdom of purchase, concern over deal, product alternatives and opinion leadership) have overall contribution to impact on post purchase dissonance by 73.1% which lies at high level. Also, findings reveal that money is always a major factor to purchase SMCG like laptops based on the income levels found. These are the major findings of the research that the researchers were evaluated. Finally, from this study, researchers can come up with the conclusion as the factors emotional discomfort, wisdom of purchase, concern over deal, product alternatives and opinion leadership have high impact on post purchase dissonance of laptop computers among undergraduates.

5. CONCLUSION

This research investigated the factors impact on post purchase dissonance of laptop computers among undergraduate students with special reference to Vavuniya Campus of the University of Jaffna. The factors emotional discomfort, wisdom of purchase, concern over deal, product alternatives and opinion leadership are estimated to be the antecedents of creating post purchase dissonance and with the acceptance of all hypotheses in the research model empirically proved that these factors have the impact on post purchase dissonance at very high level (73.1%).

Opinion leadership takes place when consumers go for the acceptance and opinions of others to justify their purchased products and go for previous satisfied customers. Product alternatives create post purchase dissonance where there is complexity among the similarity between alternatives when brand is a very important aspect in products like laptops. Emotional discomfort takes place when consumers feel negative outcomes of the purchased items. Concern over deal is a matter when the high interventions made by sales people. And wisdom of purchase treated as rational component of post purchase dissonance when customers doubt about the rightness of their purchase. As well as the researchers found that post purchase dissonance occurs at high level on SMCG. The results of the research reveal that post purchase dissonance has become as an unconditional factor causing dissatisfaction at the post purchase evaluation stage which might result in frequent complaints, switching intention, product returns, negative word of mouth as well as negative outcomes which can affect the sustainability of a company. The research findings also confirmed that, although

the 22-item scale was a very useful tool as a concept, it needed to be adapted for specific purchase patterns.

Empirical findings of this study give practical implications for marketers in high involvement products especially, laptop industries. Marketers could provide direction to buyers through enhancing customer reinforcement, relationship marketing and innovation in order to reduce post purchase dissonance. Marketers should make inherent efforts by offering stronger guarantees or warranties, detailed brochures and demonstrations about the usage, post purchase communication tools and websites with information available. Time to time, laptop industries should adopt new technologies and make innovations to build brand image and product differentiation among other alternative brands. It is advisable for marketers to effectively manage their sales staff towards low-pressure-selling techniques (making customers to feel that they have wisely engaged in the purchase) and confirm about the rightness of their deal. As well as the marketers should address to the customer complaints effectively through better customer care services, providing remedies and establishing service centres to eliminate post purchase dissonance. Further the findings of the research would be an eye opener to various marketers to know the importance of post purchase dissonance in SMCG like laptop computers for determining a consumer satisfied or dissatisfied throughout the entire process of purchasing and assess appropriate strategies to manage post purchase dissonance.

In designing this study, efforts were made to minimize the limitations, but some still needed to be addressed. The most important constraint of this research is literature gap as there were very little studies have done on post purchase dissonance in Sri Lankan context. As this research is limited to undergraduate students of Vavuniya Campus of the University of Jaffna within 120 sample size, this research might restrict the generalizability of the findings with the total population and ignored other users of laptops at other levels (professionals). Therefore; further researches can be extended in this area to fill the gap in the literature. Future researches can further explore other variables except these five, impact on post purchase dissonance and considering other relevant variables and dimensions with mediating and moderating variables on post purchase dissonance. Moreover, a mixed method approach can also be applied to SMCG like smart phones, furniture and other electronic equipments.

REFERENCES

- [1] Kaish, S. (1967). Cognitive Dissonance and the classification of consumer goods. *The Journal of Marketing*, 31(4), 28-31. Retrieved from <http://dx.doi.org/10.2307/1249462>
- [2] Oshikawa, S. (1969). Can cognitive dissonance theory explain consumer behavior. *The Journal of Marketing*, 33(4), pp.44-49.
- [3] Hasan, U., and Nasreen, R. (2012). Cognitive Dissonance and its impact on Consumer Buying Behavior. *IOSR Journal of Business and Management*, 1 (4), 07-12
Retrieved from <http://dx.doi.org/10.1007/BF02725204>
- [4] Festinger, L. (1957). *A theory of cognitive dissonance*, Stanford: University Press.
- [5] Kassarijian, Harold, H., and Cohen, and Joel, s. (1965). Cognitive Dissonance and Consumer Behavior. *California Management Review*, 8(1), pp.55-64.
- [6] Oliver, R.L. (1997). *Satisfaction: A behavioral perspective on the consumer*, McGraw-Hill, New York.
- [7] Sweeney, J.C., Hausknecht, R. (2000). Cognitive dissonance after purchase: A multidimensional scale. *Psychology and Marketing*, 17(5), 369-385.
- [8] Solomon, M., Michael, (2002). *Consumer behavior: European perspective*, M. Solomon, G. Bamossy, S. Askegaard. Prentice Hall, pp.126-153.
- [9] Schiffman, L.G., and Kanuk, L.L. (2004). *Consumer behavior*, Eighth Edition. New Jersey: Prentice Hall.
- [10] Selvarajan, P. (2016). Evaluating the Post Purchase Dissonance of Sri Lankan Buyers: An Ethnographic Approach, *ACADEMICA: An International Multidisciplinary Research Journal*, 6(7), pp.1-11.
- [11] Demirgunes, B.K., and Avcilar, M.Y. (2017). The effect of Cognitive Dissonance on

external information search and consumer complaint responses. *International Journal of Business Administration*,8(2), pp.57-72.

[12] Cummings, W.H., and Venkatesan, M. (1976). Cognitive dissonance and consumer behavior: A review of the evidence. *Journal of marketing*,13(3), pp.303-08.

[13] Oshikawa, S. (1970). Consumer pre-decisional conflict and post-decision. *Behavioral Science*, 15(1), pp.132-40.

[14] Solomon, M., Bamossy, G., Askegaard, S., and Hogg, M.K. (2006). *Consumer behavior:A European perspective*, 3rd ed., Prentice Hall, Harlow.

[15] Lurie, N.H. (2004). Decision making in information-rich environments: the role of information structure. *Journal of Consumer Research*,30(4), pp.473-486.

[16] Lake, A.L. (2009). *Consumer behavior for dummies*, Wiley Publishing Inc., Hoboken, NJ.

[17] Czinkota, M.R., Dickson, P.R., Dunne, P., Griffin, A., and Urbany, J.E. (2000). *Marketing: Best practices*, Fort Worth: The Dryden Press.

[18] Etzel, M.J., Walker, B.J., and Stanton, W.J. (2001). *Marketing*, Twelfth Edition. Boston: McGraw-Hill.

[19] Graff, J., Sponthummapharan, K., and Parida, V., (2012). Post purchase cognitive dissonance- evidence from the mobile phone market. *International Journal of Technology Marketing*, 7(1),pp.32-46.

[20] Park, C.W., and Lessing, V.P. (1977). Students and housewives: differences in susceptibility to reference group influence. *The Journal of Consumer Research*, 4(2), pp.145-158.

[21] Singh, J. (1988). Consumer complaint intentions and behavior: Definitional and taxonomical issues. *Journal of Marketing*. 52:101, pp.93-108.

[22] Heung, V.C.S., and Lam, T. (2003). Customer complaint behavior towards hotel restaurant services. *International Journal of Contemporary Hospitality Management*, 15(5), pp.283-289. Retrieved from <https://doi.org/10.1108/09596110310482209>

[23] Han, H., Kim W., and Hym, S.S. (2011). Switching intention model development: role of service of performances, customer satisfaction and switching barriers in the hotel industry. *International Journal of Hospitality Management*, 30, 619-629.

[24] Arens, W.F. (2004). *Marketing and consumer behavior: The foundations of advertising*, Eighth Edition. Boston: McGraw-Hill.