

## **The Effects Of Customer Satisfaction and Switching Costs On Customer Loyalty In Health Care**

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### **Extensive Summary**

During the last 20 years, companies started paying more attention to customer loyalty to retain existing customers due to increased competition globally. Existing studies showed that customer satisfaction is one of the most important factors in achieving customer loyalty (Palmer, 1998; Jones and Sasser, 1995; Oliver, 1999). However, although customer satisfaction influence purchase behavior (Kotler, 1998), it may not be sufficient for customer loyalty (Fornell, 1992). Because of that, companies may try to create structural barriers so that it may be more difficult for customers to prefer another brand or product. These barriers increase the cost of changing brand or product for the customer and one of the most important structural barriers is accepted as the switching costs (Klemperer, 1987a; Farrel ve Shapiro, 1988; Klemperer, 1995). Switching costs are the economic, physical and psychological costs that customer face when he/she switch from one brand/product to another (Jackson, 1985). These costs lowers customer loss due to slight fluctuations in product quality in the short-run (Fornell, 1992) and also, by having a monopoly power on existing customers, current market share becomes an important determinant for future income flow (Klemperer, 1987b; Klemperer, 1987c; Schlesinger and Schulenburg, 1991; Beggs and Klemperer, 1992).

The main objective of this study is to investigate the relationship between customer loyalty and customer satisfaction in health care sector. Moreover, the study also evaluates the direct and moderating effects of switching costs on customer loyalty. For the analysis, three different switching costs are evaluated to observe the different effects on loyalty. These more homogeneous sub-groups are: financial, psychological and procedural switching costs. To collect data, this study used Aydın (2005) to prepare a questionnaire form and asked 12500 patients in two hospitals in Ankara to answer the questions. Only about 10% of the patients accepted to answer the questions. However, after further evaluations of the forms, only 780 of them were used in the

study. Out of 780 forms, there was an even distribution between gender of the patients, 50% being female and the other 50% being male. Moreover, results indicate that 80% was married and 51% had at least university education. Average age for responders was 41, with ages of responders ranging between 16 and 97.

For the analysis, we use factor analysis to create factors for loyalty, satisfaction and switching costs. In selecting the number of factors, we rely on eigenvalue and scree plot criteria. For each factor, the Cronbach's  $\alpha$  and Keiser's MSA values are above the acceptable limits. Since we have a cross-sectional data, the study uses least squares regression with heteroscedasticity consistent standard errors. Two regression equations are estimated. The first one takes into account only the direct effect of customer satisfaction and switching costs on customer loyalty. The second regression includes moderating effects of switching costs on loyalty by using interaction terms between switching costs and satisfaction.

Three hypothesis are tested in this study. The first hypothesis states that satisfaction influence loyalty positively and significantly in health care sector. The second hypothesis indicates a similar relationship between loyalty and switching costs. That is, switching costs increase customer loyalty. The last hypothesis states that switching costs will lower the effect of satisfaction on loyalty. In other words, even with lower satisfaction level, customers will behave like loyal customers when there are costs associated with changing hospitals.

All our model estimation results support the first hypothesis. In other words, we find strong and highly significant positive relationship between satisfaction and loyalty. Hence, we do not reject hypothesis 1. This result is not surprising as the literature also provides similar empirical results in all sectors. For the second hypothesis, our results do not provide significant direct effect on loyalty for all sub-groups of switching costs. Our findings show that financial switching costs are the most important costs and these costs impact loyalty positively and strongly. We also find some evidence that psychological switching costs have a positive effect on loyalty. However, there does not seem to be any relationship between procedural switching costs and customer loyalty directly. With respect to our second hypothesis, again we find that moderating effect on loyalty comes only from financial costs related to changing hospitals. The other switching cost sub-groups seem not to be important for loyalty indirectly.

To analyze the relationship among loyalty, satisfaction and switching costs in more detail, we segment responders into more homogeneous sub-groups by using responder characteristics. For this reason, the gender, age, education level and income levels of patients are used. When we look at the gender of the patients, we find that the results do not change significantly. However, we notice that while psychological and procedural switching costs have a direct effect on loyalty for female patients, while these two group of switching costs are not important for male patients. Moderating effects, as before, have a minor effect on loyalty.

For the second patient characteristic, patient age is used and the responders are split into two groups by the average age of 41. As a result, one segment include younger patients, while the other one include older patients. Direct effects show a similar pattern for both groups and they are similar to earlier findings. However, for older group, we find that financial switching cost lowers the effectiveness of satisfaction on loyalty. The findings for segments using education level also similar to earlier findings. However,

psychological switching costs appears to be positive and significant for responders who did not attend university. Moreover, while we find some evidence for moderating effects of switching costs on loyalty for university and higher education segment, there was no moderating effect for pre-university education segment.

Our last segmentation uses income level of responders as income level can be important for the importance of switching costs. We split responders into three homogeneous groups: income level less than or equal to 1700 Turkish Liras, between 1700 and 3500, and more than 3500 liras. As before, satisfaction has a strong and positive impact on loyalty. Moreover, for high income group, the coefficient is significantly larger than the low- or middle-income groups, implying that patients at high-income level pay more attention to satisfaction. For the high-income segment, switching costs have no direct impact on loyalty. However, the loyalty of patients in this segment is indirectly influenced by procedural switching costs. Overall, the moderating effects do not seem to be important. For low- and middle-income groups, we find that switching costs influence loyalty positively. The effect appears to be larger for low-income group.

In this study, we investigate the effect of satisfaction and switching costs on patient loyalty, taking into account the moderating effect of switching costs. In sum, our findings show that customer satisfaction is an important factor for customer loyalty. Moreover, our analysis provide evidence that switching costs, in particular financial costs, increase customer loyalty directly. However, with respect to moderating effects of switching costs, we do not find strong evidence. If there is a moderating effect, this is mostly related to financial costs associated with changing hospitals. Our findings do not change significantly for moderating effects when we look at more homogeneous sub-groups based on patient characteristics. As a result, for health care sector, we can argue that satisfaction and especially financial switching costs are important for loyalty. However, there is no strong evidence for the existence of moderating effects.